

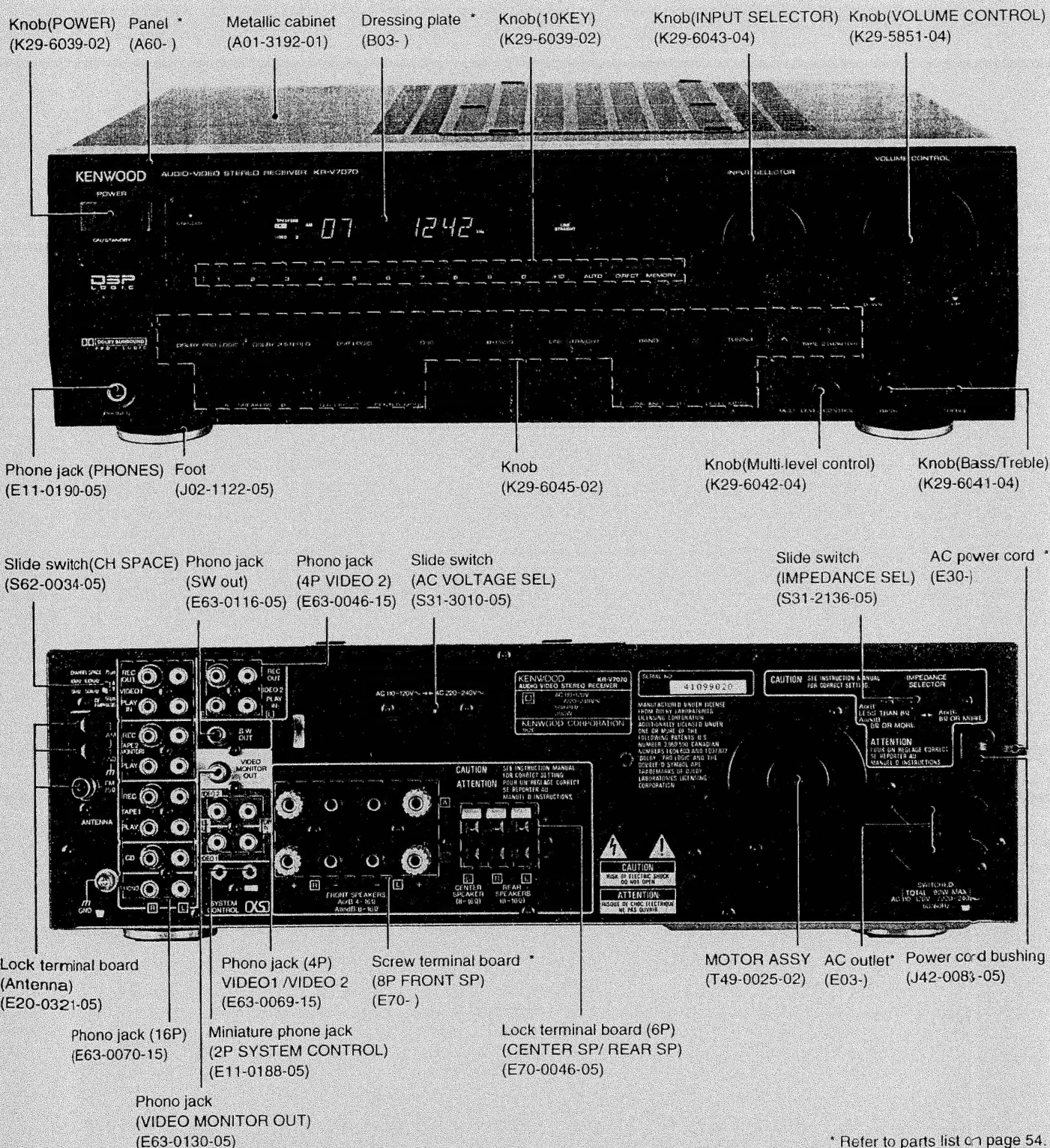
AUDIO-VIDEO STEREO RECEIVER

# KR-V7070

## SERVICE MANUAL

# KENWOOD

© 1995-1 PRINTED IN KOREA  
B51-5020-00 (S) 3949





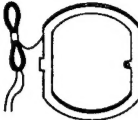
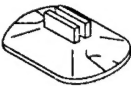
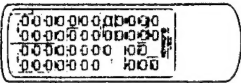

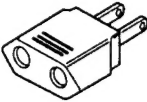
\* Refer to parts list on page 54.

# KR-V7070

## CONTENTS

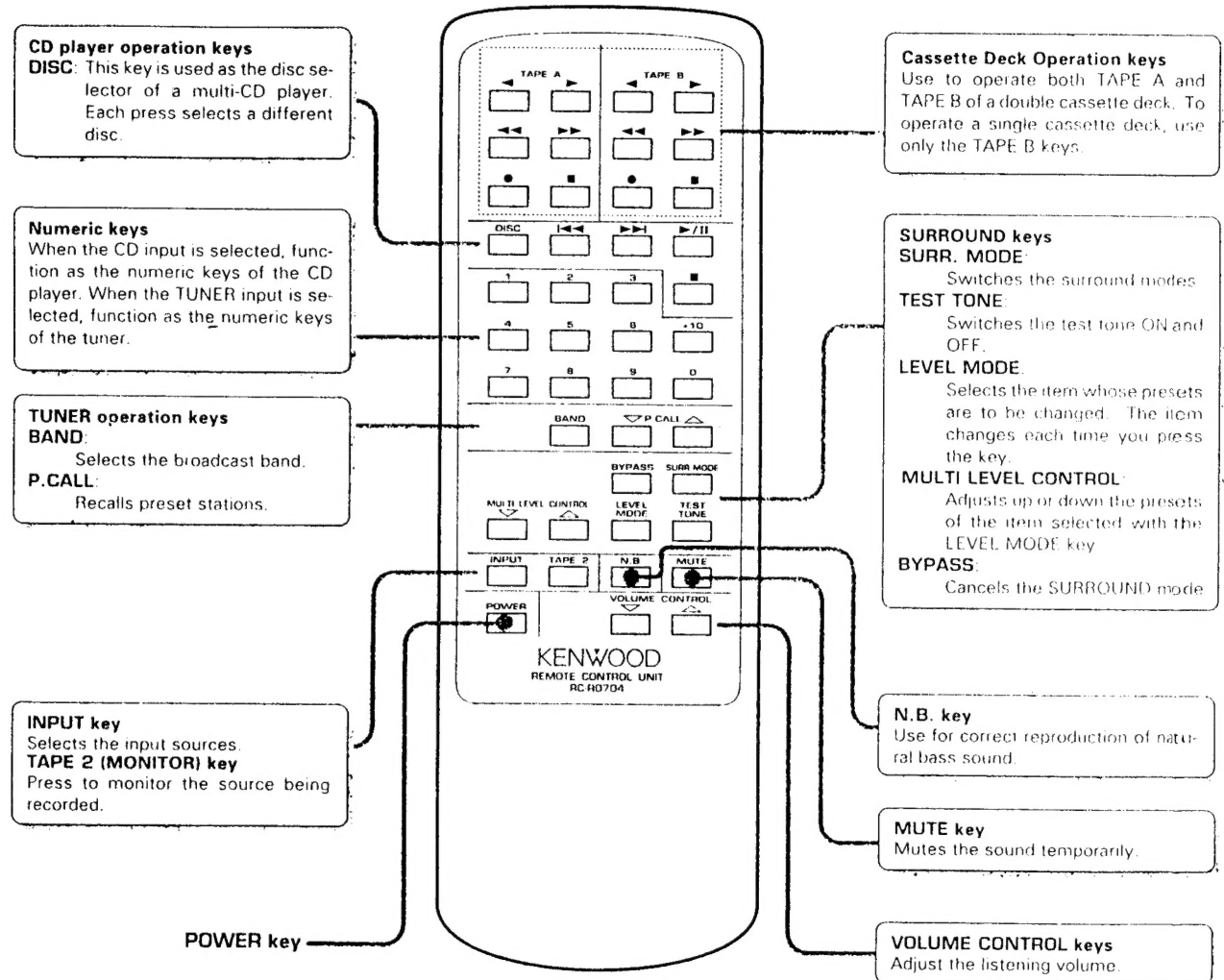
REMOTE CONTROL UNIT .....	3	PC BOARD(Component side view)	
CONTROL UNIT .....	4	TUNER UNIT .....	23
DISASSEMBLY FOR REPAIR .....	5	MAIN AMP UNIT .....	25
BLOCK DIAGRAM .....	7	AUDIO UNIT .....	29
CIRCUIT DESCRIPTION .....	9	DISPLAY UNIT .....	31
ADJUSTMENT/AJUSTES .....	19	SCHEMATIC DIAGRAM .....	33
WIRING DIAGRAM .....	21	EXPLODED VIEW .....	52
		PARTS LIST .....	54
		SPECIFICATIONS .....	BACK COVER

## ACCESSORIES

FM indoor antenna .....(1) (T90-0801-05) 	Antenna adaptor .....(1) (T90-0198-05) 	AM loop antenna assy .....(1) (T90-0195-05) 	Loop antenna stand (J19-3645-05) 
Remote control unit .....(1) (A70-1009-05):RC-R0704 BATTERY COVER: (A09-0194-08) 	Batteries(R6/AA) .....(2) 	AC plug adaptor .....(1) (E03-0115-05):M only 	

# KR-V7070

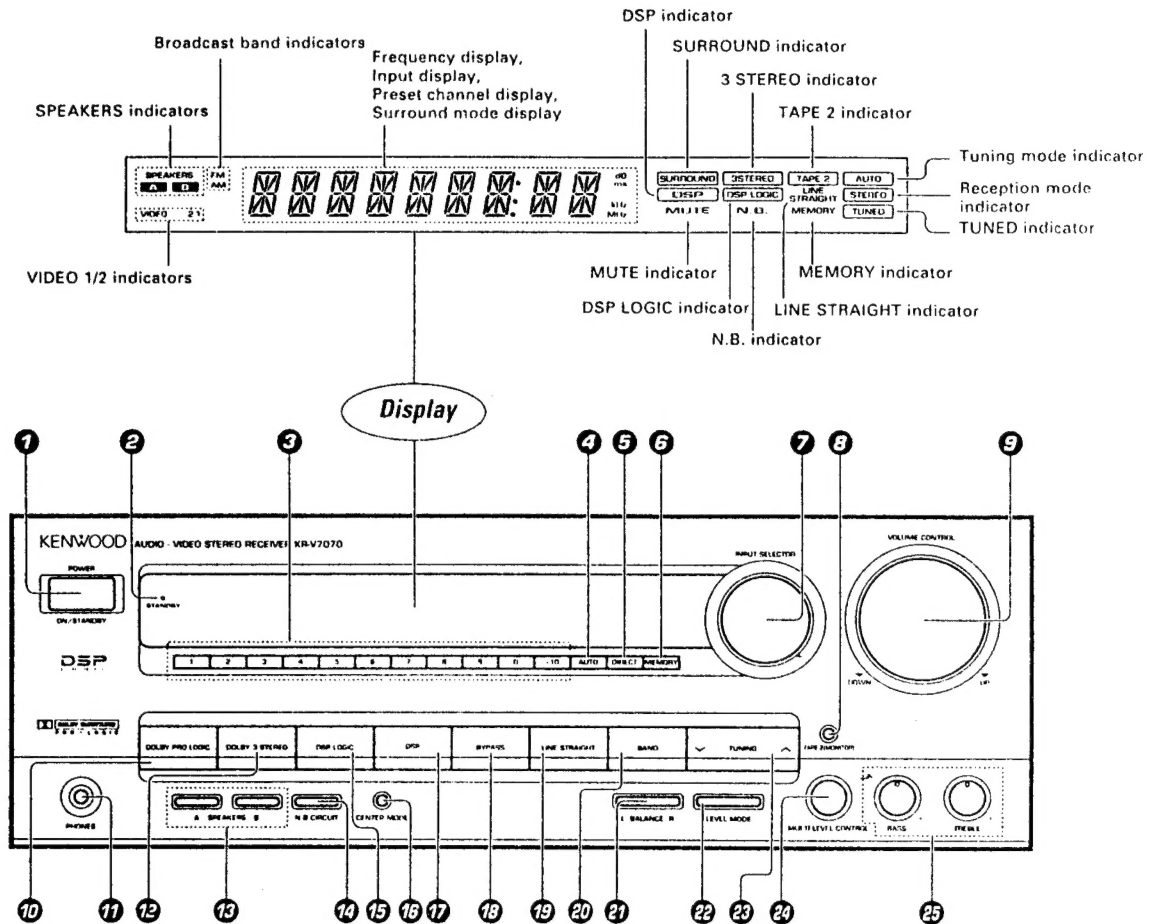
## REMOTE CONTROL UNIT



Model: RC-R0704  
 Infrared ray system

# KR-V7070

## CONTROL UNIT



- ① **POWER key**
- ② **STANDBY indicator**
- ③ **Numeric keys**
- ④ **AUTO key**
- ⑤ **DIRECT key**  
Press for direct station tuning based on numerical input.
- ⑥ **MEMORY key**  
Press to preset a station in the memory.
- ⑦ **INPUT SELECTOR knob**  
Turn to select the input sources.
- ⑧ **TAPE 2(MONITOR) key**
- ⑨ **VOLUME CONTROL knob**
- ⑩ **DOLBY PRO LOGIC key**
- ⑪ **PHONES jack**  
Used for headphone listening.

- ⑫ **DOLBY 3 STEREO key**
- ⑬ **SPEAKERS A/B keys**  
Press to select the A and/or B speaker systems.
- ⑭ **N. B. CIRCUIT key**  
Use for correct reproduction of natural bass sound.
- ⑮ **DSP LOGIC key**
- ⑯ **CENTER MODE key**  
Press to select the center mode of the DOLBY PRO LOGIC surround play.
- ⑰ **DSP key**
- ⑱ **BYPASS key**  
Press to cancel the surround modes.
- ⑲ **LINE STRAIGHT key**  
Press to reproduce the source with a higher sound quality.

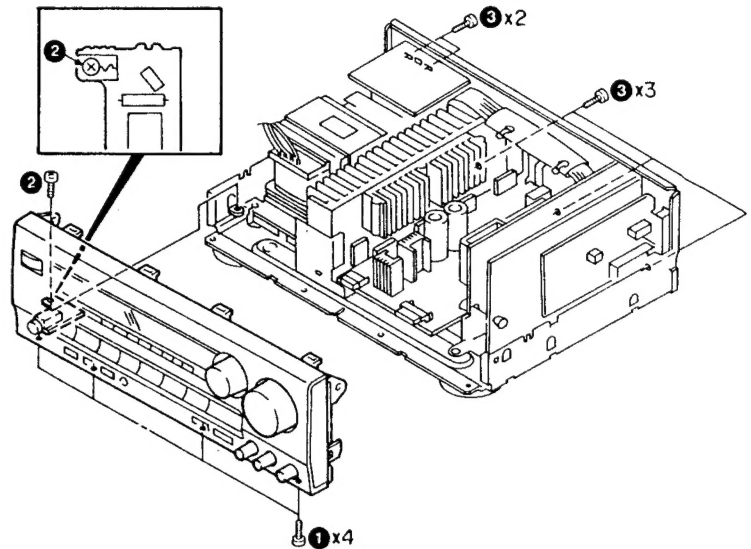
- ⑳ **BAND key**  
Press to switch the broadcast band.
- ㉑ **BALANCE keys**  
Turn to adjust the volume balance between left and right.
- ㉒ **LEVEL MODE key**  
Selects the item whose presets are to be changed (in SURROUND MODE).
- ㉓ **TUNING keys**
- ㉔ **MULTI LEVEL CONTROL knob**  
Adjusts up or down the presets of the item selected with the LEVEL MODE key (in SURROUND MODE).
- ㉕ **Tone control knobs**



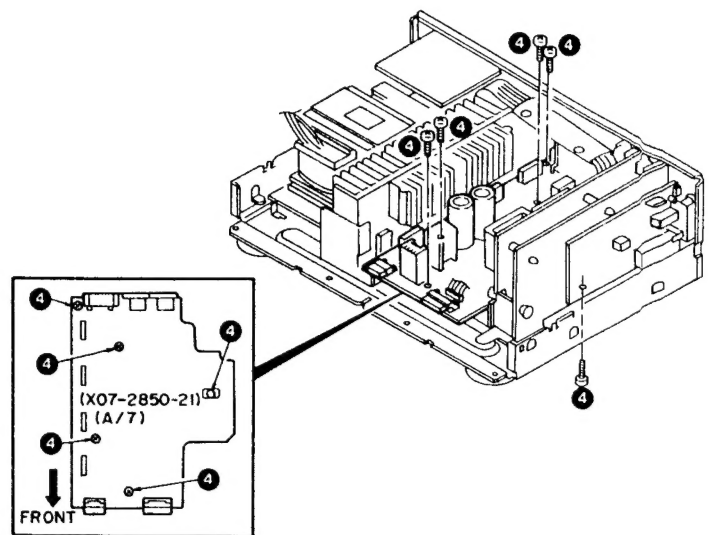
# KR-V7070

## DISASSEMBLY FOR REPAIR

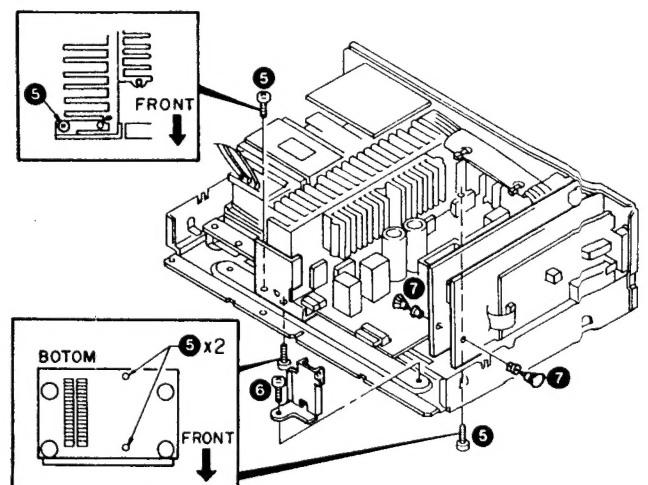
1. Remove the four front panel screws ( ❶ ).
2. Remove the one phone jack PCB screw ( ❷ ).
3. Remove the five rear panel screws ( ❸ ).



4. Remove the five main PCB screws ( ❹ ).



5. Remove the three heat sink mounting hardware screws ( ❺ ).
6. Remove the one X09 BCB mounting hardware screw ( ❻ ).
7. Remove the two push rivets ( ❼ ).

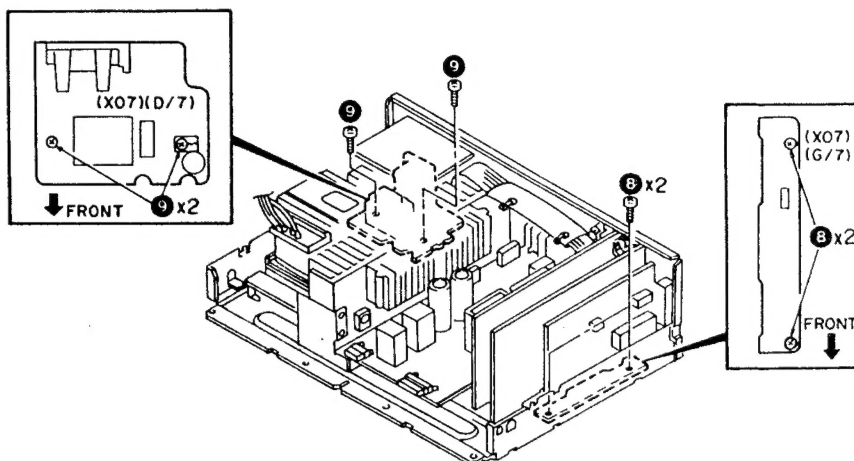


# KR-V7070

## DISASSEMBLY FOR REPAIR

8. Remove the two (X07) (G/7) PCB screws ( 8 ).

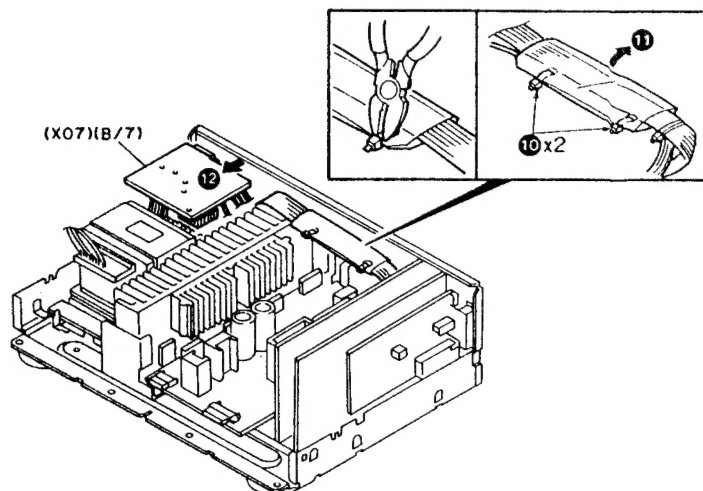
9. Remove the two (X07) (D/7) PCB screws ( 9 ).



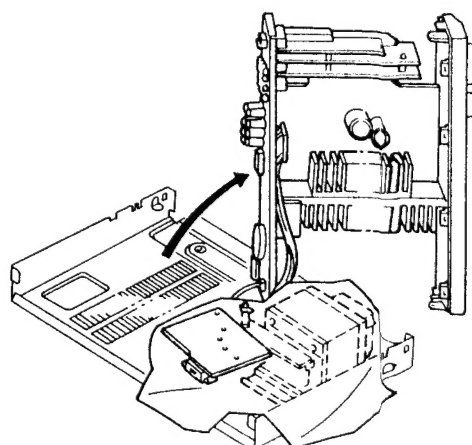
10. Cut the two wire bands ( 10 ).

11. Remove the insulating sheet ( 11 ). [Y.M type]

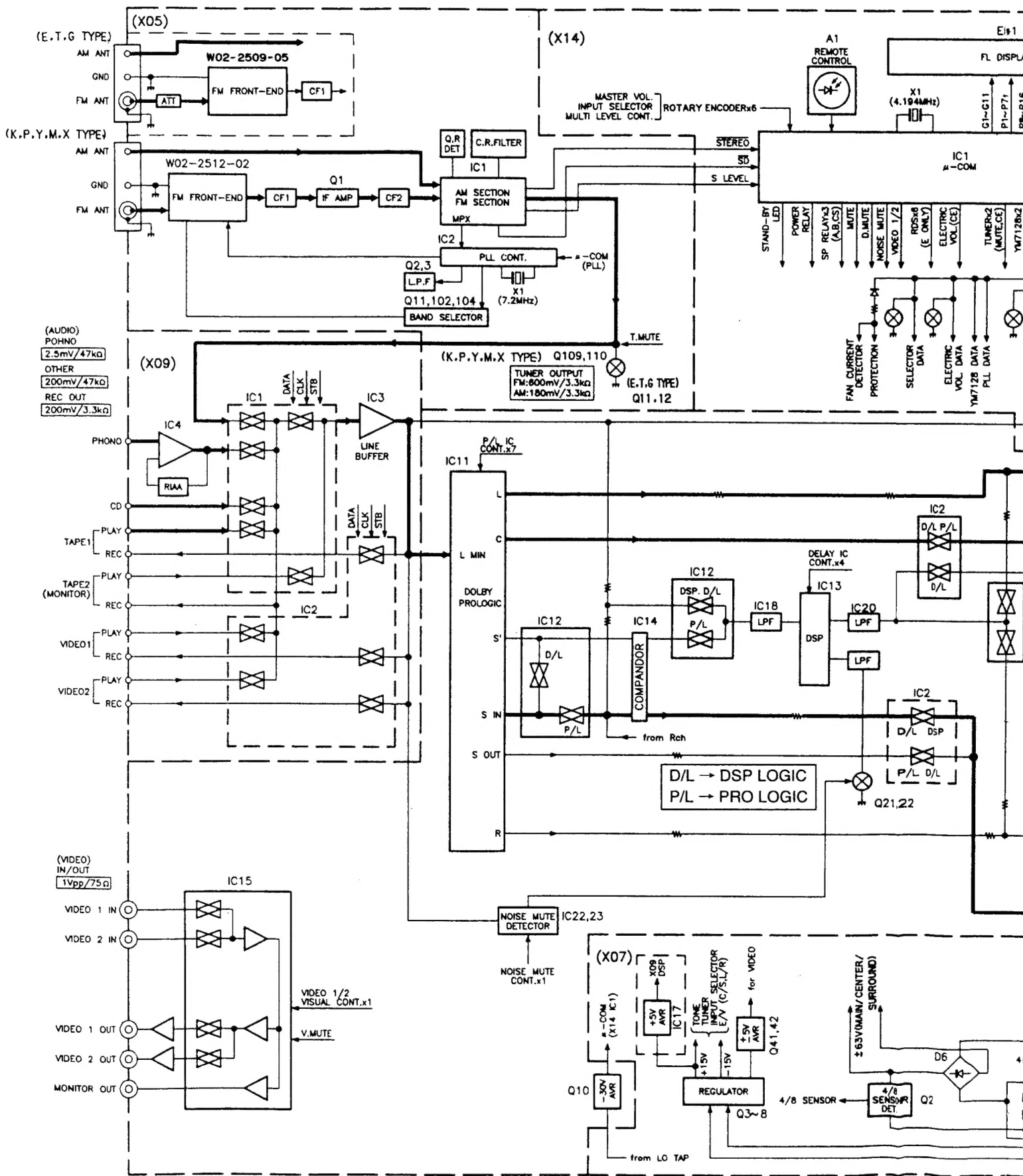
12. Remove the (X07) (B/7) PCB ( 12 ).



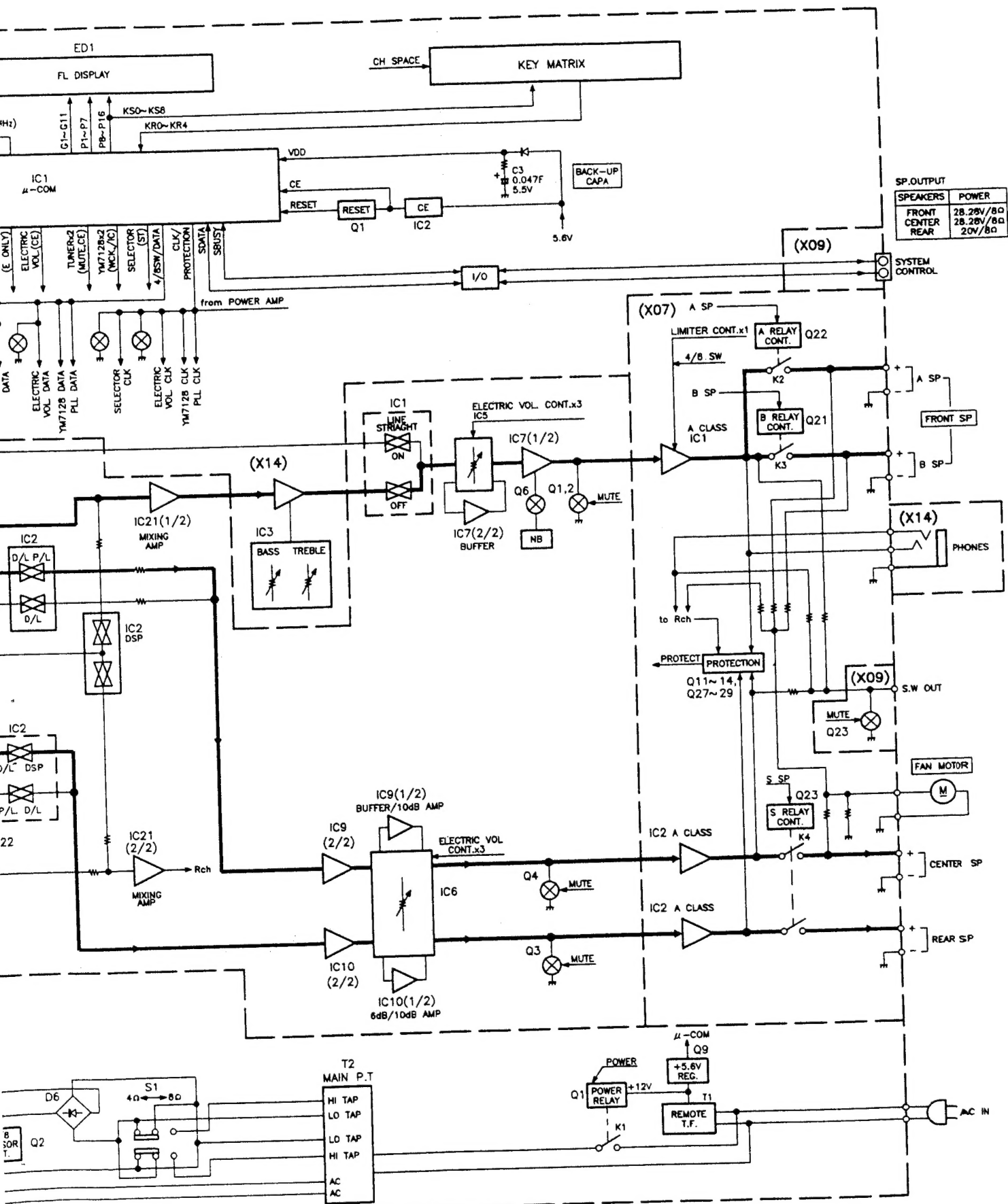
13. Stand the set with left side down ward.  
(Lay a cloth on top of the transformer.)



## BLOCK DIAGRAM



## KR-V7070





## CIRCUIT DESCRIPTION

### 1. INITIAL STATE

#### (1) POWER OFF

#### (2) AMP-related block

• AUDIO SELECTOR	TUNER
• VIDEO SELECTOR	VIDEO 1
• SPEAKER A	ON
• SPEAKER B	OFF
• TAPE 2 MONITOR	OFF
• LINE STRAIGHT	OFF
• VISUAL FIX	OFF
• N.B. CIRCUIT	OFF
• BALANCE	CENTER
• VOLUME	-65 dB

#### (3) SURROUND-related block

• MODE	BYPASS (OFF)
• CENTER LEVEL	0 dB
• REAR LEVEL	0 dB
• CENTER MODE	NORMAL
• DSP MODE	ARENA
• DSP LOGIC MODE	LARGE
• EFFECT LEVEL:	

#### KR-V8070

DSP	ARENA	-2 dB
	JAZZ CLUB	-2 dB
	STADIUM	+2 dB
DSP LOGIC		0 dB

#### KR-V7070

DSP	0 dB
DSP LOGIC	0 dB

#### • DELAY TIME

#### KR-V8070

DSP	ARENA	10 msec
	JAZZ CLUB	20 msec
	STADIUM	30 msec

DSP LOGIC	LARGE	20 msec
	SMALL	30 msec

PRO LOGIC		20 msec
-----------	--	---------

#### KR-V7070

DSP	40 msec
DSP LOGIC	40 msec
PRO LOGIC	20 msec

#### (4) Tune-related block

• BAND	FM
• FREQUENCY	Lower-limit value of FM (87.50 MHz)
• Tuning MODE	AUTO TUNING (AUTO STEREO)
• P. CH DISPLAY	-- CH
• Preset memory	

Table 1-1 Initial Data List of Tuner

Channel	BAND	K1 TYPE	BAND	K2 TYPE	BAND	E TYPE
01ch	FM	87.50MHz	FM	87.50MHz	FM	87.50MHz
02ch	FM	98.00MHz	FM	98.00MHz	FM	98.00MHz
03ch	FM	108.00MHz	FM	108.00MHz	FM	108.00MHz
04ch	AM	630kHz	AM	630kHz	AM	630kHz
05ch	AM	990kHz	AM	990kHz	AM	990kHz
06ch	AM	1440kHz	AM	1440kHz	AM	1440kHz
07ch	FM	87.50MHz	FM	87.50MHz	FM	87.50MHz
08ch	FM	87.50MHz	FM	87.50MHz	FM	87.50MHz
09ch	FM	87.50MHz	FM	87.50MHz	FM	87.50MHz
10ch	FM	89.10MHz	FM	89.10MHz	FM	89.10MHz
11ch	FM	88.00MHz	FM	88.00MHz	FM	88.00MHz
12ch	FM	90.00MHz	FM	90.00MHz	FM	90.00MHz
13ch	FM	97.50MHz	FM	97.50MHz	FM	97.50MHz
14ch	FM	98.50MHz	FM	98.50MHz	FM	98.50MHz
15ch	FM	106.00MHz	FM	106.00MHz	FM	106.00MHz
16ch	AM	530kHz	AM	530kHz	AM	531kHz
17ch	AM	1000kHz	AM	1000kHz	AM	999kHz
18ch	AM	1700kHz	AM	1610kHz	AM	1602kHz
19ch	FM	96.30MHz	FM	96.30MHz	FM	96.30MHz
20ch	FM	107.00MHz	FM	107.00MHz	FM	107.00MHz
21CH	FM	87.50MHz	FM	87.50MHz	FM	87.50MHz
22CH	FM	87.50MHz	FM	87.50MHz	FM	87.50MHz
23CH	FM	87.50MHz	FM	87.50MHz	FM	87.50MHz
24CH	FM	87.50MHz	FM	87.50MHz	FM	87.50MHz
25CH	FM	87.50MHz	FM	87.50MHz	FM	87.50MHz
26CH	FM	87.50MHz	FM	87.50MHz	FM	87.50MHz
27CH	FM	87.50MHz	FM	87.50MHz	FM	87.50MHz
28CH	FM	87.50MHz	FM	87.50MHz	FM	87.50MHz
29CH	FM	87.50MHz	FM	87.50MHz	FM	87.50MHz
30CH	FM	87.50MHz	FM	87.50MHz	FM	87.50MHz
31CH	FM	87.50MHz	FM	87.50MHz	FM	87.50MHz
32CH	FM	87.50MHz	FM	87.50MHz	FM	87.50MHz
33CH	FM	87.50MHz	FM	87.50MHz	FM	87.50MHz
34CH	FM	87.50MHz	FM	87.50MHz	FM	87.50MHz
35CH	FM	87.50MHz	FM	87.50MHz	FM	87.50MHz
36CH	FM	87.50MHz	FM	87.50MHz	FM	87.50MHz
37CH	FM	87.50MHz	FM	87.50MHz	FM	87.50MHz
38CH	FM	87.50MHz	FM	87.50MHz	FM	87.50MHz
39CH	FM	87.50MHz	FM	87.50MHz	FM	87.50MHz
40CH	FM	87.50MHz	FM	87.50MHz	FM	87.50MHz

# KR-V7070

## CIRCUIT DESCRIPTION

### 2. BACKUP

This function holds the current state of the unit even if the AC power of the AV receiver is turned OFF.

#### (1) Operation outline

The backup state set command signal (CE) of a microcomputer is set low when the AC power is turned OFF. The microcomputer detects the signal and enters the stop state.

The microcomputer is reset when the AC power is turned ON. The data for backup state confirmation is checked by reset processing.

The microcomputer is initialized when the data was destroyed. If it is not destroyed, the microcomputer is started in the backup state.

- The data (16-bit) for backup state confirmation is written in a RAM area.
- The microcomputer is set to the STOP mode so as to save the power consumption.
- A backup state set command signal is detected by a timer interrupt of 1 msec.
- The backup guarantee period is set in a circuit.

#### (2) Backup state setting

- The data (16-bit)(01011010 01101001b = 5A69h) for backup state confirmation is written in a RAM area.
- Setting the special function port  
Set the input/output port of a serial interface to the serial interface operation stop mode. Set the FIP controller to the display OFF mode.
- Setting the microcomputer's internal special function  
Set all the interrupt enable flags to the disable state, respectively. Set the microcomputer to the STOP mode and stop the system clock oscillation of the microcomputer.

#### (3) Contents of backup data to be held

- POWER ON/OFF state
- VOLUME LEVEL data
- BALANCE LEVEL data
- N.B. ON/OFF
- SELECTOR MODE data
- SURROUND MODE data
- DELAY TIME data (PRO LOGIC, DSP, and DSP LOGIC)
- EFFECT LEVEL data (DSP and DSP LOGIC)
- CENTER LEVEL data (DSP LOGIC, PRO LOGIC, and 3 STEREO)
- REAR LEVEL data (DSP, DSP LOGIC, and PRO LOGIC)

- TUNER RECEIVING STATION FREQUENCY data
- TUNER PRESET MEMORY data
- TUNER AUTO/MANUAL mode

### 3. PROTECTION

The protection state is entered when abnormality is detected during the POWER-ON sequence.

- The power and speaker are turned OFF when the abnormal state is detected during the POWER-ON sequence.
- The STANDBY LED blinks every 500 msec.
- The fluorescent display indicator goes OFF.

## CIRCUIT DESCRIPTION

### 4. DESTINATION AND MODEL LIST

Table 4-1 Destination and Model List

MODEL		KR-V8070	KR-V7070
DESTINATION		KPMXY	KPMXYET
FUNCTION			
AMP	DSP	○○○○○	○○○○○○○
	VISUAL FIX	○○○○○	×××××××
TUNER	K1	×○×××	×○××××
	K2	○○○×○	○○○×○××
	E1	××○○○	××○○○○○
	E3 (RDS)	×××××	×××××○○

○ :YES  
× :NO

### 5. DESTINATION LIST OF TUNER

Table 5-1 Destination List of Tuner

Destination	BAND	Receive frequency range	channel space	1F	PLL reference frequency	Destination DSW(X14-)		
						DSW2	DSW1	DSW0
						P25	P24,28	P23
K1	FM	87.5MHz~108.0MHz	100kHz	10.7MHz	50kHz	0	0	0
	AM	530kHz~1700kHz	10kHz	450kHz	10kHz			
K2	FM	87.5MHz~108.0MHz	100kHz	10.7MHz	50kHz	*1		
	AM	530kHz~1610kHz	10kHz	450kHz	10kHz			
E1	FM	87.5MHz~108.0MHz	50kHz	10.7MHz	50kHz	0	1	1
	AM	531kHz~1602kHz	9kHz	450kHz	10kHz			
E3	FM	87.5MHz~108.0MHz	50kHz	10.7MHz	50kHz	1	0	1
	AM	531kHz~1602kHz	9kHz	450kHz	9kHz			

\*1 Set as K2 for except when the data for destination description is K1, E1, and E3.

### ※ ATTENTION

A SUB WOOFER output signal is output irrespective of SP selector switch (ASP and BSP) ON/OFF setting

The RDS PTY AF search always corresponds to a span search of 100kHz. Therefore, a span search of 50 kHz cannot be performed.

# KR-V7070

## CIRCUIT DESCRIPTION

### 6. TEST MODE

#### 6-1. TEST MODE OF MAIN UNIT

##### (1) Setting the test mode

The main unit is put into the test mode when the AC power is turned ON while pressing the "TUNING DOWN" key. The following state is obtained when the test mode of the main unit is set.

- The power is turned ON automatically.
- All the fluorescent display indicators and LEDs light. (The all-illuminated state is cleared by pressing any main unit key.)
- The backup state except when the power is turned ON and OFF is initialized.

##### (2) Canceling the test mode

Turn OFF the AC power.

##### (3) Tuner functions

- Preset channel call function
  - 1) Calls channels 1 to 9 (keys 1 to 9) and channel 10 (key 0) when the 10 key is not operated.
  - 2) Calls channels 11 to 19 (keys 1 to 9) and channel 20 (key 0) when the +10 key is operated once.
  - 3) Calls channels 21 to 29 (keys 1 to 9) and channel 30 (key 0) when the +10 key is operated two times and calls channels 31 to 39 (keys 1 to 9) and channel 40 (key 0) when the +10 key is operated three times.
  - 4) Shifts to the operation obtained when the +10 key is not operated if it is operated four times.

- All turn-off function

Turns OFF and ON all the LEDs cyclically using the "MULTI MODE" key. This function is executed only when the SELECTOR mode is set to TUNER. In states other than TUNER, the original function of this key is executed.

- Mute signal output

No Selector MUTE (MUTE 1) control regulation is done whatever.

##### (4) AMP function

The original function of each key is executed when the SELECTOR mode is set to TUNER. The test mode operation is not performed in this case.

- FRONT VOLUME setting

Sets the maximum value (0 dB) of the front volume using the "AUTO" key.

Sets the minimum value ( $-\infty$  dB) of the front volume using the "TAPE2" key.

- BALANCE L/R setting

Sets the most left edge of the balance using the "BALANCE L" key.

Sets the center of the balance using the "MEMORY" key.

Sets the most right edge of the balance using the "BALANCE R" key.

- TEST TONE operation

Uses the "DIRECT" key instead of the "TEST TONE" key.

- MUTE signal output

Sets the analog muting to OFF at all times. No control is performed in this case. Sets the analog muting to ON in the same way as during normal operation when the front volume is set to the minimum value ( $-\infty$  dB).

- Impedance 4/8 selection

No impedance 4/8 display appears in the normal state. Therefore, the SPEAKERS lamp of the fluorescent display indicator is turned ON and OFF in the test mode.

The SPEAKERS lamp is turned on when the impedance is 4.

The SPEAKERS lamp is turned off when the impedance is 8.

#### 6-2. SERIAL TEST MODE

##### (1) Setting the serial test mode

The unit is put into the serial test mode when a serial code "TEST ON" is input during the power-on sequence.

In the 8-bit serial test mode, serial code 71H is input.

In the 16-bit serial test mode, serial code C27FH is input.

- In the serial test mode, all remote control keys and ordinary serial codes are disabled. Only the panel keys perform the same operation as usually.

##### (2) Canceling the serial test mode

- The serial test mode is canceled to return to the ordinary mode by inputting a "TEST OFF" code. After the ordinary mode was returned, the serial mode is returned to the state before the test mode is entered. The backup operation is not initialized.

- The serial test mode is also canceled when the AC power is turned OFF.

##### (3) Cautions

- The serial test code is prescribed as a 16-bit code only.
- The operations below are inhibited in the serial test mode.

Manual tuning up/down operation

Up/down selection in PTY selection mode

AF search in ATT ON state

The operations mentioned above cannot be guaranteed when they are performed in the serial test mode.

- An identical code is output when the serial test mode code is input.

- A TUNED ON/TUNED OFF code is only output.



## CIRCUIT DESCRIPTION

## (4) SERIAL TEST CODE LIST

Table 6-1 Serial Test Code List

Serial test code	Description	Serial test code	Description
C200H	Turn OFF the power.	C298H	Perform the 8 key operation.
C201H	Turn ON the power.	C299H	Perform the 9 key operation.
C202H	Set the selector to PHONO.	C29AH	Perform the +10 key operation.
C203H	Set the selector to CD.	C29BH	Set the band FM.
C204H	Set the selector to TUNER.	C29CH	Set the band AM.
C205H	Set the selector to TAPE1.	C29EH	Perform the tuning DOWN operation.
C209H	Set the selector to VIDEO1.	C29FH	Perform the tuning UP operation.
C20AH	Set the selector to VIDEO2.	C2A0H	Set the TUNER MEMORY mode.
C20BH	Set the selector to VIDEO3.	C302H	Set the surround level to BYPASS.
C20CH	Set the selector to VIDEO4.	C303H	Set the surround level to PRO LOGIC.
C20DH	Turn ON the analog muting.	C304H	Set the surround level to 3 STEREO.
C20FH	Turn OFF the analog muting.	C309H	Set the CENTER mode to NORMAL.
C216H	Set the line straight to OFF.	C30AH	Set the CENTER mode to WIDE BAND.
C217H	Set the line straight to ON.	C30BH	Set the CENTER mode to PHANTOM.
C21EH	Set speaker A to OFF.	C30CH	Set the TEST TONE mode to OFF.
C21FH	Set speaker A to ON.	C30DH	Set the TEST TONE mode to ON.
C220H	Set speaker B to OFF.	C312H	Set the center level to the minimum value.
C221H	Set speaker B to ON.	C313H	Set the center level to the middle value.
C228H	Set the TAPE2 monitor to OFF.	C314H	Set the center level to the maximum value.
C229H	Set the TAPE2 monitor to ON.	C315H	Set the rear level to the minimum value.
C23FH	Set the NB circuit to ON.	C316H	Set the rear level to the middle value.
C240H	Set the NB circuit to OFF.	C317H	Set the rear level to the maximum value.
C247H	Set the balance channel L to the maximum value.	C318H	Set the delay time to the minimum value.
C248H	Set the balance channels L and R to the center value.	C319H	Set the delay time to the middle value.
C249H	Set the balance channel R to the maximum value.	C31AH	Set the delay time to the maximum value.
C279H	Set all turn-off mode of FLs and LEDs to OFF.	C31BH	Set the effect level to the minimum value.
C27AH	Set all turn-off mode of FLs and LEDs to ON.	C31CH	Set the effect level to the middle value.
C27BH	Set all turn-on mode of FLs and LEDs to OFF.	C31DH	Set the effect level to the maximum value.
C27CH	Set all turn-on mode of FLs and LEDs to ON.	C33AH	Set the DSP mode to ARENA.
C27DH	Initializes the system	C33BH	Set the DSP mode to JAZZ CLUB.
C27EH	Set the serial test mode to OFF.	C33CH	Set the DSP mode to STADIUM.
C27FH	Set the serial test mode to ON (71H in 8-bit mode)	C34CH	Set the DSP LOGIC mode to LARGE.
C282H	Set the tuner muting to OFF.	C34DH	Set the DSP LOGIC mode to SMALL.
C283H	Set the tuner muting to ON.	C400H	Set the volume value to 0 dB.
C284H	Set the TUNER AUTO STEREO mode.	C401H	Set the volume value to -1 dB.
C285H	Set TUNER MONAURAL mode.	C402H	Set the volume value to -2 dB.
C286H	TUNED OFF code	C403H	Set the volume value to -3 dB.
C287H	TUNED ON code	C404H	Set the volume value to -4 dB.
C28FH	Set the TUNER DIRECT mode.	C405H	Set the volume value to -5 dB.
C290H	Perform the 0 key operation.	C406H	Set the volume value to -6 dB.
C291H	Perform the 1 key operation.	C407H	Set the volume value to -7 dB.
C292H	Perform the 2 key operation.	C408H	Set the volume value to -8 dB.
C293H	Perform the 3 key operation.	C409H	Set the volume value to -9 dB.
C294H	Perform the 4 key operation.	C40AH	Set the volume value to -10 dB.

# KR-V7070

## CIRCUIT DESCRIPTION

Serial test code	Description	Serial test code	Description
C295H	Perform the 5 key operation.	C40BH	Set the volume value to -11 dB.
C296H	Perform the 6 key operation.	C40CH	Set the volume value to -12 dB.
C297H	Perform the 7 key operation.	C40DH	Set the volume value to -13 dB.
C40EH	Set the volume value to -14 dB.	C42BH	Set the volume value to -43 dB.
C40FH	Set the volume value to -15 dB.	C42CH	Set the volume value to -44 dB.
C410H	Set the volume value to -16 dB.	C42DH	Set the volume value to -45 dB.
C411H	Set the volume value to -17 dB.	C42EH	Set the volume value to -46 dB.
C412H	Set the volume value to -18 dB.	C42FH	Set the volume value to -47 dB.
C413H	Set the volume value to -19 dB.	C430H	Set the volume value to -48 dB.
C414H	Set the volume value to -20 dB.	C431H	Set the volume value to -49 dB.
C415H	Set the volume value to -21 dB.	C432H	Set the volume value to -50 dB.
C416H	Set the volume value to -22 dB.	C433H	Set the volume value to -51 dB.
C417H	Set the volume value to -23 dB.	C434H	Set the volume value to -52 dB.
C418H	Set the volume value to -24 dB.	C435H	Set the volume value to -53 dB.
C419H	Set the volume value to -25 dB.	C436H	Set the volume value to -54 dB.
C41AH	Set the volume value to -26 dB.	C437H	Set the volume value to -55 dB.
C41BH	Set the volume value to -27 dB.	C438H	Set the volume value to -56 dB.
C41CH	Set the volume value to -28 dB.	C439H	Set the volume value to -57 dB.
C41DH	Set the volume value to -29 dB.	C43AH	Set the volume value to -58 dB.
C41EH	Set the volume value to -30 dB.	C43BH	Set the volume value to -59 dB.
C41FH	Set the volume value to -31 dB.	C43CH	Set the volume value to -60 dB.
C420H	Set the volume value to -32 dB.	C43DH	Set the volume value to -61 dB.
C421H	Set the volume value to -33 dB.	C43EH	Set the volume value to -62 dB.
C422H	Set the volume value to -34 dB.	C43FH	Set the volume value to -63 dB.
C423H	Set the volume value to -35 dB.	C440H	Set the volume value to -64 dB.
C424H	Set the volume value to -36 dB.	C441H	Set the volume value to -65 dB.
C425H	Set the volume value to -37 dB.	C442H	Set the volume value to -66 dB.
C426H	Set the volume value to -38 dB.	C443H	Set the volume value to -67 dB.
C427H	Set the volume value to -39 dB.	C444H	Set the volume value to -68 dB.
C428H	Set the volume value to -40 dB.	C445H	Set the volume value to -69 dB.
C429H	Set the volume value to -41 dB.	C446H	Set the volume value to -∞ dB.
C42AH	Set the volume value to -42 dB.		

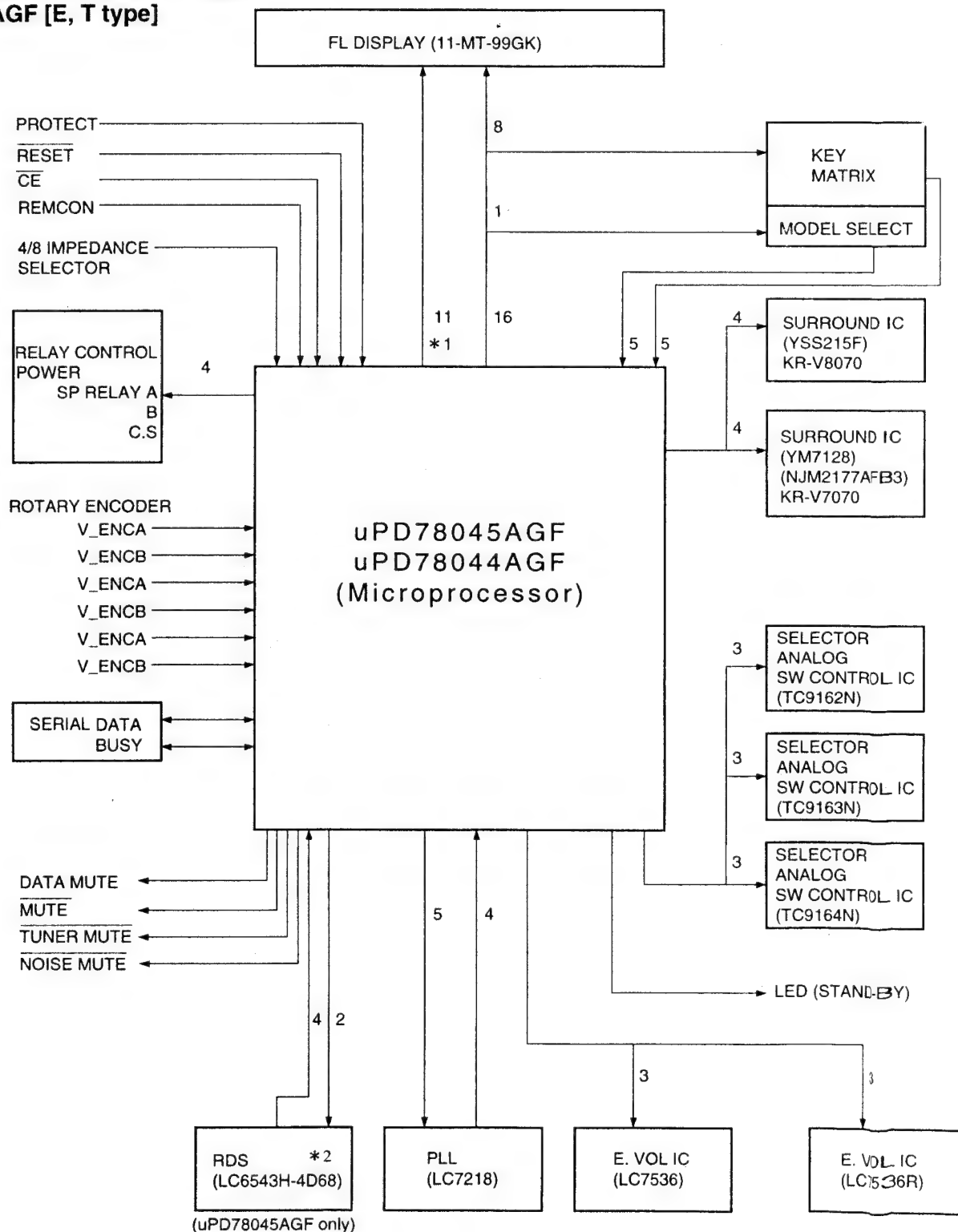
## CIRCUIT DESCRIPTION

7. Micro processor:  $\mu$  PD 78044AGF (X14:IC1)  
 $\mu$  PD 78045AGF

### Block diagram

$\mu$  PD 78044AGF [K, P, M, X, Y type]

$\mu$  PD 78045AGF [E, T type]



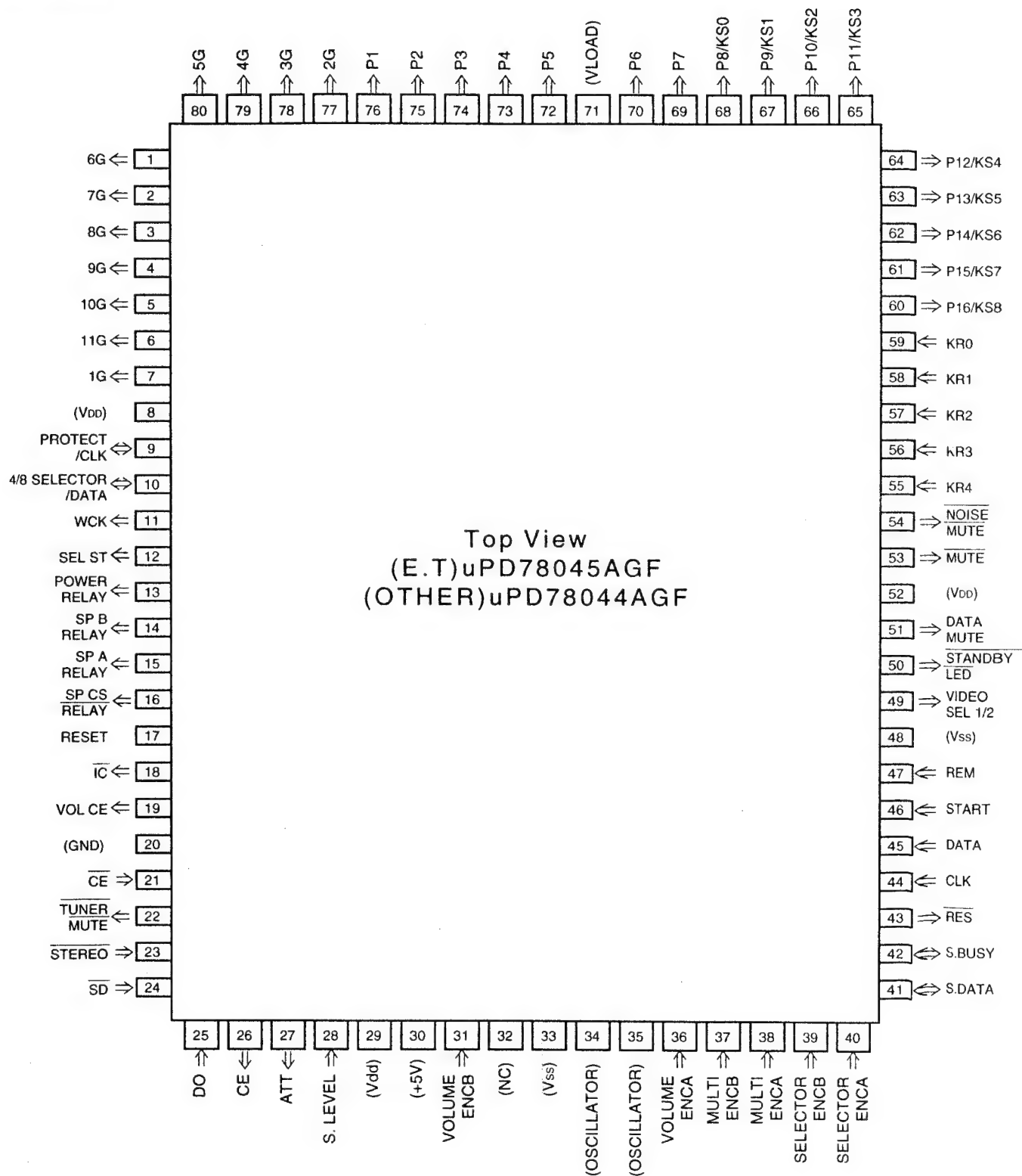
\*1 GRID to FL

\*2 E3 Type (RDS feature installed) used RDS cyn microprocessor (LC6543H-4D68).

# KR-V7070

## CIRCUIT DESCRIPTION

### Port layout





## CIRCUIT DESCRIPTION

## 7.1 PIN FUNCTION

For pin numbers marked by an asterisk (\*) the upper row is  $\mu$ PD78045AGF and the lower ( $\square$ ) row is  $\mu$ PD78044AGF.

Pin NO.	Pin name	Port I/O	Name	Description	Active
1	P94/FIP6	O	6G	FL grid 6	_____
2	P93/FIP5	O	7G	FL grid 7	_____
3	P92/FIP4	O	8G	FL grid 8	_____
4	P91/FIP3	O	9G	FL grid 9	_____
5	P90/FIP2	O	10G	FL grid 10	_____
6	P81/FIP1	O	11G	FL grid 11	_____
7	P80FIP0	O	1G	FL grid 1	_____
8	Vcc	_____	Vdd	Micro processor power supply	_____
9	P27/ SCK0	I/O	PROTECT/CLK	IN:Protection detection OUT:Control IC clock	L:ON
10	P26/S00/SB1	I/O	4/8 SELECT/DATA	IN:Speaker impedance selector OUT:Control IC data	H:8 L:4
11	P25/SI0/SB0	O	WCK	DSP IC address/data discrimination signal (YSS215/YM7218)	H:ADDRESS L:DATA
12	P24/BUSY	O	SEL ST.	Selector IC data definition signal	H:ADDRESS L:DATA
13	P23/STB	O	POWER RELAY	Power relay control	H:ON
14	P22/ SCK1	O	SP B RELAY	Speaker B relay control	H:ON
15	P21/S01	O	SP A RELAY	Speaker A relay control	H:ON
16	P20/SI1	O	SP CS RELAY	Surround speaker relay control	H:ON
17	RESET	I	RESET	Microprocessor reset	L:RESET ON
18	P74	O	IC	DSP IC reset control (YSS215/YM7218)	L:RESET ON
19	P73	O	VOL CE	Volume IC address/data CE	H:ADDRESS L:DATA
20	A Vss	_____	GND	A/D power supply (GND)	_____
21	P17/AN17	I	CE	Back up detection	L:BACK UP ON
22	P16/AN16	O	TUNER MUTE	Tuner mute control	L:MUTE ON
23	P15/AN15	I	STEREO	Stereo signal detection	L:STEREO ON
24	P14/AN14	I	SD	Synchronized signal detection	_____
25	P13/AN13	I	DO	IF count data (PLL DO)	_____
26	P12/AN12	O	CE (PLL)	PLL Chip enable control	H:OH
* 27	P11/AN11	O	ATT (RDS)	Attenuate control	H:ON
* 28	P10/AN10	I	S.LEVEL (RDS)	Signal level	H:ON
29	A Vcc	_____	Vdd	A/D power supply	_____
30	A Vref	_____	+5V	A/D reference voltage	_____
31	P04/XT1	I	VOLUME ENCB	Volume encoder input B	L:ON
32	XT2	_____	NC		_____
33	Vss	_____	Vss	Microprocessor power supply	_____
34	X1	_____	OSC	4.19MHz oscillator	_____
35	X2	_____	OSC	4.19MHz oscillator	_____
36	P37	I	VOLUME ENCA	Volume encoder input A	L:ON
37	P36/BUZ	I	MULTI ENCB	Multi level encoder input B	L:ON
38	P35/PCL	I	MULTI ENCA	Multi level encoder input A	L:ON
39	P34/T12	I	SELECTOR ENCB	Selector encoder input B	L:ON
40	P33/T11	I	SELECTOR ENCA	Selector encoder input A	L:ON
41	P32/T02	I/O	S. DATA	8/16 bit system data	_____
42	P31/T01	I/O	S. BUSY	8/16 bit system busy	H:BUSY L:READY
* 43	P30/T00	O	RES (RDS)	RDS IC reset signal	L:RESET ON
* 44	P03/INTP3/C10	I	CLK (RDS)	RDS clock	_____

# KR-V7070

## CIRCUIT DESCRIPTION

Pin NO.	Pin name	Port I/O	Name	Description	Active
* 45	P02/INTP2	I	DATA (RDS)	RDS data	_____
* 46	P01/INTP1	I	START (RDS)	RDS data start signal	L:START
47	P00/INTP0	I	REM	Remote control input	_____
48	IC	_____	Vss		_____
49	P72	OUT	VIDEO SEL 1/2	Video selector	H:V 1,4 L:V 2,3
50	P71	OUT	STANDBY LED	Standby LED	L:LED ON
51	P70	OUT	DATA MUTE	Data mute	H:MUTE ON
52	Vcc	_____	Vcc	Microprocesser power supply	_____
53	P127/FIP33	OUT	MUTE	Analog mute control	L:MUTE ON
54	P126/FIP32	OUT	NOISE MUTE	Noise mute control	L:MUTE ON
55	P125/FIP31	IN	KR4	Key return 4	_____
56	P124/FIP30	IN	KR3	Key return 3	_____
57	P123/FIP29	IN	KR2	Key return 2	_____
58	P122/FIP28	IN	KR1	Key return 1	_____
59	P121/FIP27	IN	KR0	Key return 0	_____
60	P120/FIP26	OUT	P16/KS8	FL segment 16/key scan 8	_____
61	P117/FIP25	OUT	P15/KS7	FL segment 15/key scan 7	_____
62	P116/FIP24	OUT	P14/KS6	FL segment 14/key scan 6	_____
63	P115/FIP23	OUT	P13/KS5	FL segment 13/key scan 5	_____
64	P114/FIP22	OUT	P12/KS4	FL segment 12/key scan 4	_____
65	P113/FIP21	OUT	P11/KS3	FL segment 11/key scan 3	_____
66	P112/FIP20	OUT	P10/KS2	FL segment 10/key scan 2	_____
67	P111/FIP19	OUT	P9/KS1	FL segment 09/key scan 1	_____
68	P110/FIP18	OUT	P8/KS0	FL segment 08/key scan 0	_____
69	P107/FIP17	OUT	P7	FL segment 01	_____
70	P106/FIP16	OUT	P6	FL segment 02	_____
71	V load	_____	V load	FL drive power supply	_____
72	P105/FIP15	OUT	P5	FL segment 03	_____
73	P104/FIP14	OUT	P4	FL segment 04	_____
74	P103/FIP13	OUT	P3	FL segment 05	_____
75	P102/FIP12	OUT	P2	FL segment 06	_____
76	P101/FIP11	OUT	P1	FL segment 07	_____
77	P100/FIP10	OUT	2G	FL grid 2	_____
78	P97/FIP9	OUT	3G	FL grid 3	_____
79	P96/FIP8	OUT	4G	FL grid 4	_____
80	P95/FIP7	OUT	5G	FL grid 5	_____

※ The RDS PTY AF search always corresponds to a span search of 100kHz. Therefore, a span search of 50 kHz cannot be performed.

# KR-V7070

## CIRCUIT DESCRIPTION/ADJUSTMENT

### 8 KEY MATRIX

Table 8-1 Key Matrix List

KRTN KSCN	KR0	KR1	KR2	KR3	KR4
KS0	7 (10KEY)	6 (10KEY)	N. B. CIRCUIT	PRO LOGIC	DIRECT
KS1	8 (10KEY)	5 (10KEY)	SP. B	LINE STRAIGHT	MEMORY
KS2	9 (10KEY)	4 (10KEY)	SP. A	BALANCE L	PTY *2
KS3	0 (10KEY)	3 (10KEY)	CENTER MODE	BALANCE R	AF *2
KS4	+10	2 (10KEY)	DSP	—	BAND
KS5	—	1 (10KEY)	DSP LOGIC	—	TUNER DOWN
KS6	AUTO/MANUAL	POWER	3 STEREO	VISUAL FIX *1	TUNER UP
KS7	DISPLAY *2	—	—	MULTI LEVEL MODE	TAPE 2
KS8	DSW0 *5	DSW1 *5	DSW2 *5	DSW3 *3	DSW4 *4

\*1 For KR-V8070 only.

\*2 The destination is E3 type only. For another destination, there is no key. (RDS function)

\*3 Used for description of each model.

\*4 Used for operation selector of 8- or 16- bit serial data.

\*5 Used for discrimination of the destination. (Refer to the Destination List of Tuner in Table 5-1. )

### 8.1 Model Discrimination List

• KS8 and KR3 are used as a DSW switch for model discrimination. Each data is shown in the table below. Each model is discriminated only during reset initialization simultaneously with the discrimination of the destination.

• KS8 and KR4 are used for the operation selection of 8- or 16- bit serial data. The 8- and 16- bit serial data are selected only during reset initialization.

Table 8-2 Model Discrimination List

Model	DSW	DSW3 (D26)
KR-V8070		0
KR-V7070		1

Table 8-3 8-/16- bit Selection

Serial cord	DSW	DSW4
8- bit serial		0
16- bit serial		1

## ADJUSTMENT

### ENGLISH (E, T TYPE)

No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	TUNER SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
<b>FM SECTION</b>		<b>SELECTOR:FM</b>					
1	DISCRIMINATOR	(A) 98.0MHz 1kHz, ±40kHz dev. (E, T type) 60dBμ (ANT input)	Connect a DC voltmeter between TP3 and TP4 (X05-)	AUTO or MONO 98.0MHz	1.3 (X05-)	0V	(a)
2	DISTORTION (STEREO)	(C) 98.0MHz 1kHz, ±40kHz dev. Pilot: ±6kHz dev. (E, T type) 60dBμ (ANT input)	(B)	AUTO 98.0MHz	IFT (W02-)	Minimum distortion.	(a)
<b>AUDIO SECTION</b>							
<1>	IDLE CURRENT		(E) Connect a DC voltmeter across CP1(L) CP2(R) CP3(CENTER) CP4(REAR)	Volume:0	VR1(L) VR2(R) VR3(CENTER) VR4(REAR) (X07-)	22mV	(b)

# KR-V7070

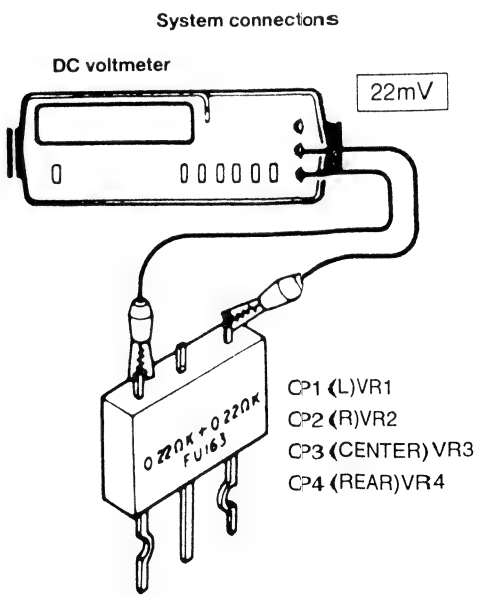
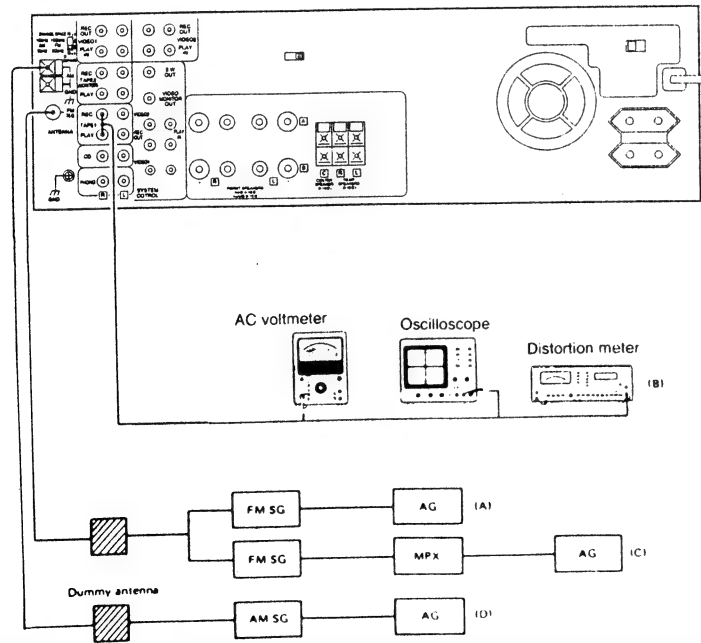
## ADJUSTMENT/AJUSTES

### ESPAÑOL (E, T TYPE)

Núm.	ÍTEM	AJUSTES DE ENTRADA	AJUSTES DE SALIDA	AJUSTES DEL SINTONIZADOR	PUNTOS DE ALINEACIÓN	ALINEACIÓN PARA	FIG.
SECCIÓN DE FM		SELECTOR:FM					
1	DISCRIMINADOR	(A) 98.0MHz 1kHz,±40kHz dev.(E,T type) 60dBμ(Entrada de antena)	Conecte un voltímetro de CC entre TP3 y TP4 (X05-)	AUTO or MONO 98.0MHz	1.3 (X05-)	0V	(a)
2	DISTORSIÓN (ESTÉREO)	(C) 98.0MHz 1kHz,±40kHz dev. Pilot:±6kHz dev. (E,T type) 60dBμ(Entrada de antena)	(B)	AUTO 98.0MHz	IFT (W02-)	Distorsión mínima.	(a)
A menos que se especifique otra cosa, los controles individuales deberán ajustarse de la forma siguiente:							
POWER:ON		SPEAKER:B	SELECTOR:PHONO				
1	OCIOSA CORRIENTE	-	Conecte un voltímetro de CC entre CP1(L) y CP2(R) y CP3(CENTER) y CP4(REAR)	Volume:0	VR1(L) VR2(R) VR3(CENTER) VR4(REAR) (X07-)	22mV	(b)

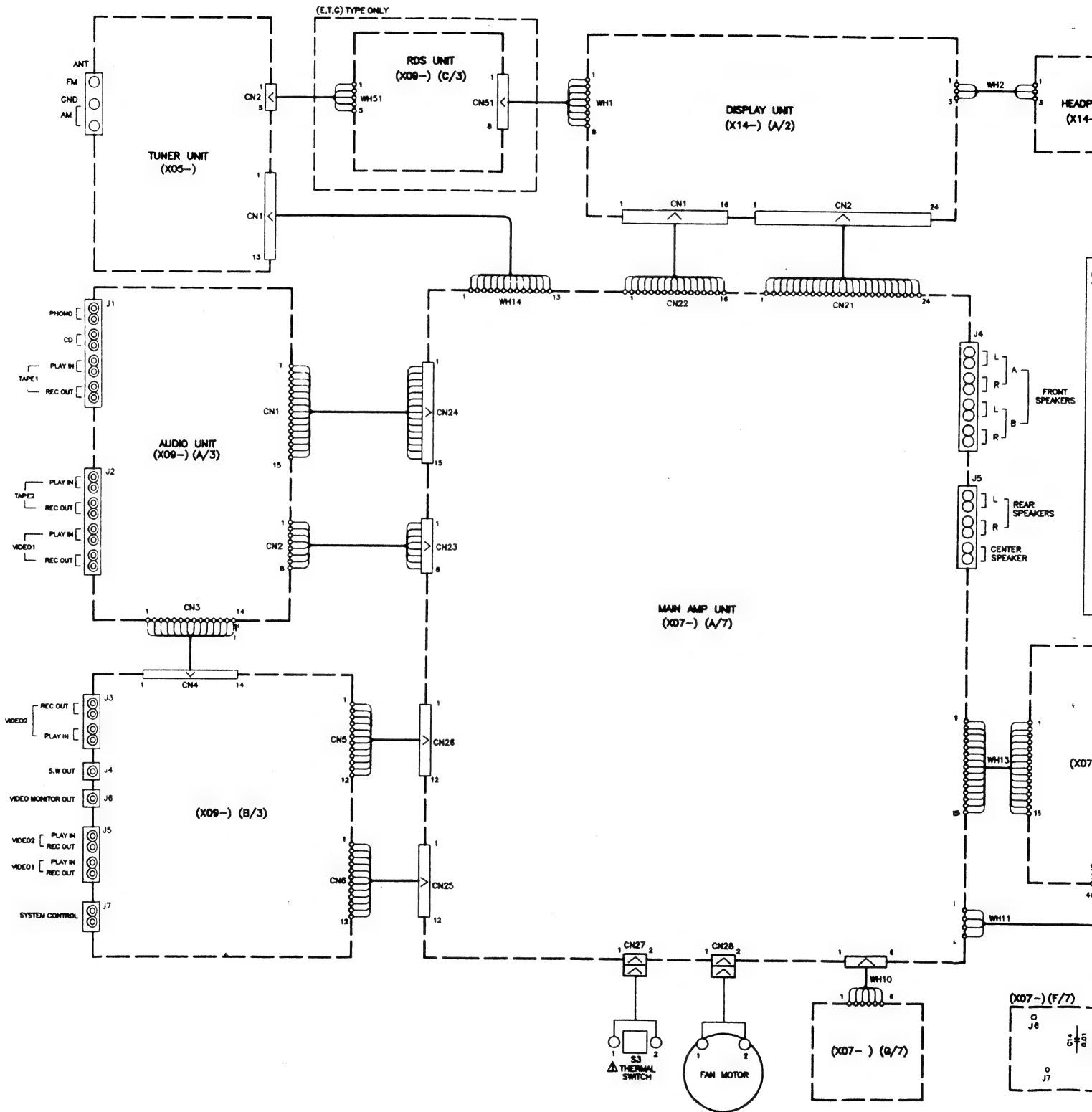
(a)

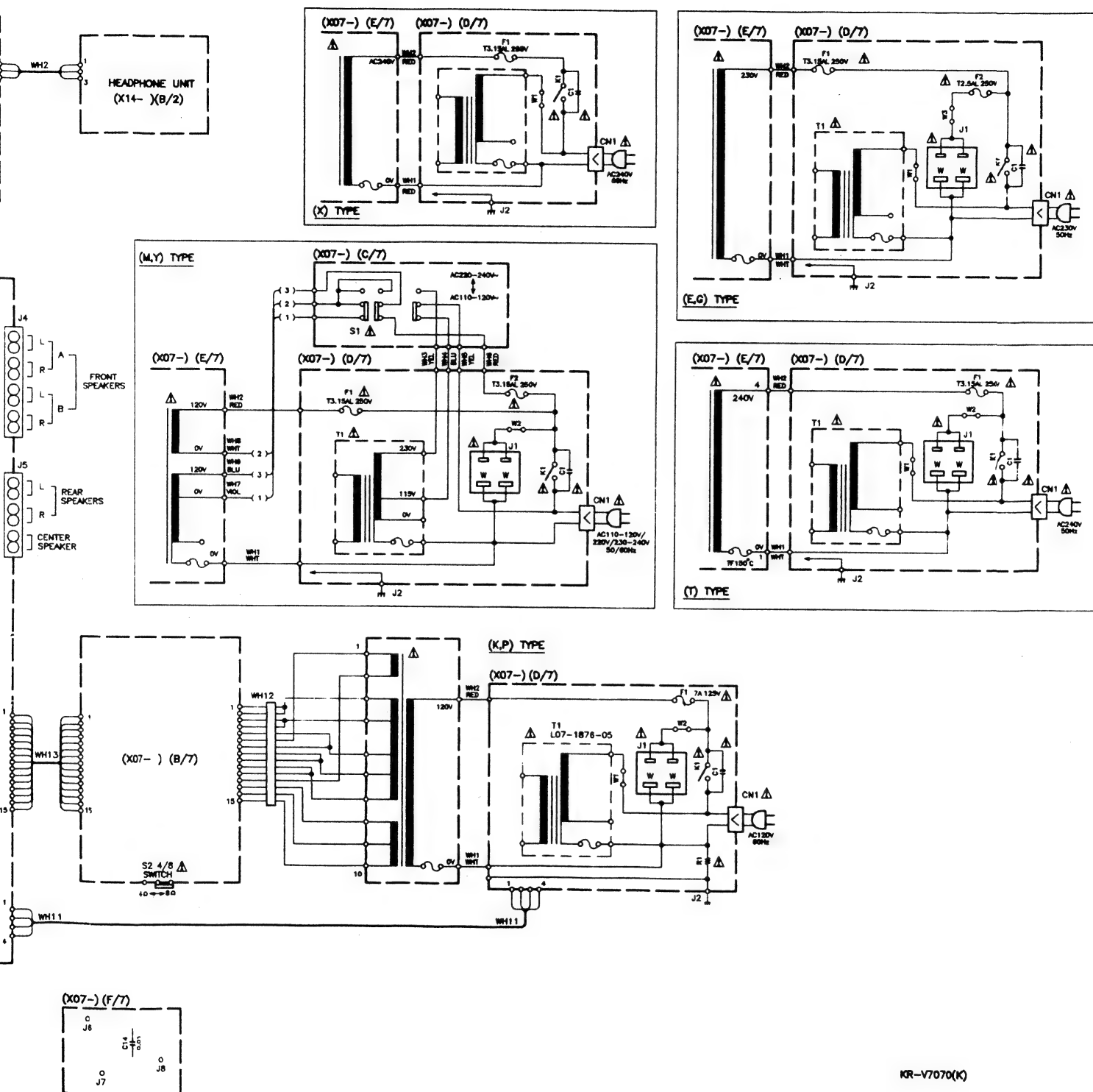
(b)





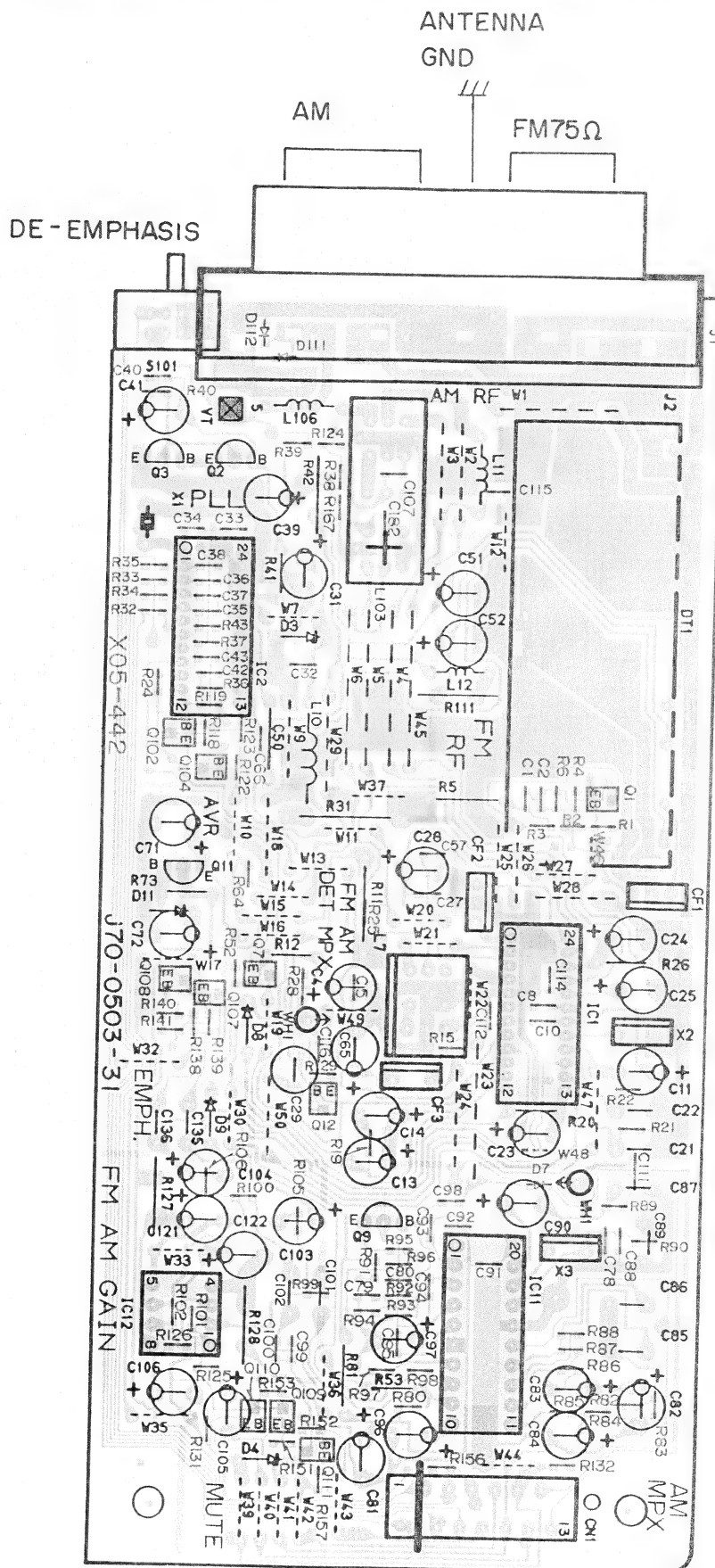
## WIRING DIAGRAM



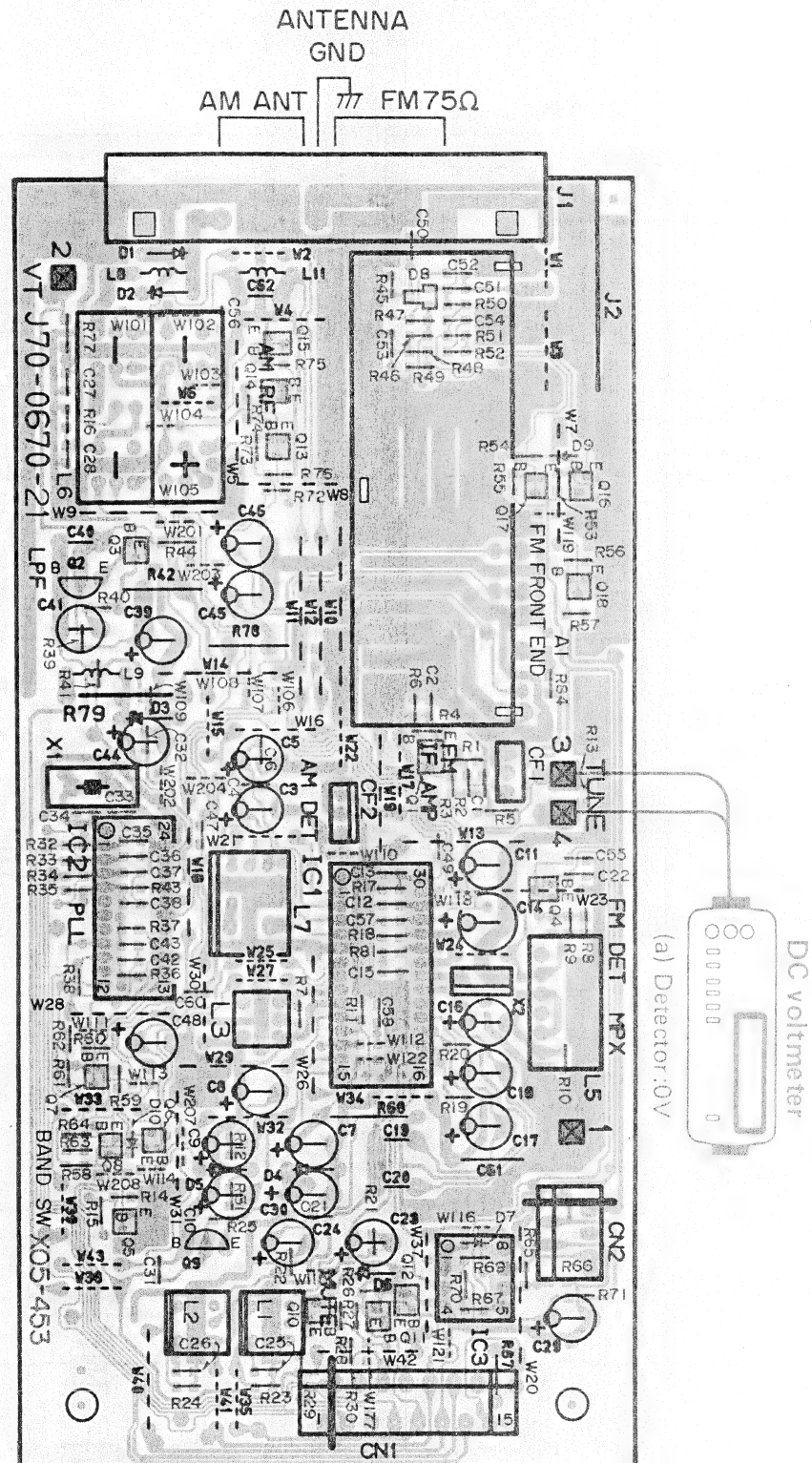


# PC BOARD (Component side view)

TUNER UNIT (X05-4460-13):KS, PS, -23:YS, MS, -73:XS



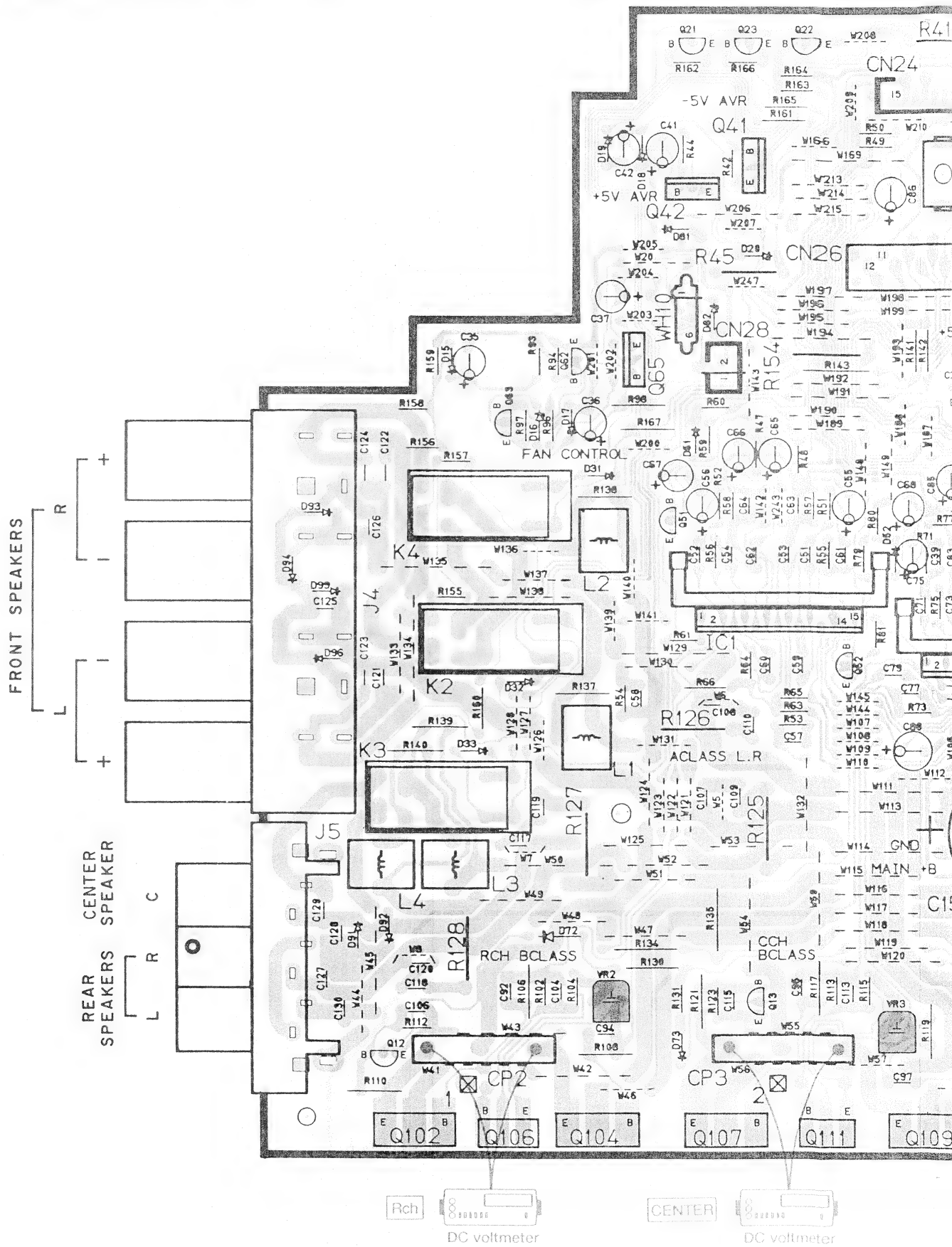
# TUNER UNIT (X05-4532-70):TS, ES, GS



Refer to the schematic diagram for the values of resistors and capacitors.

# PC BOARD (Component side view)

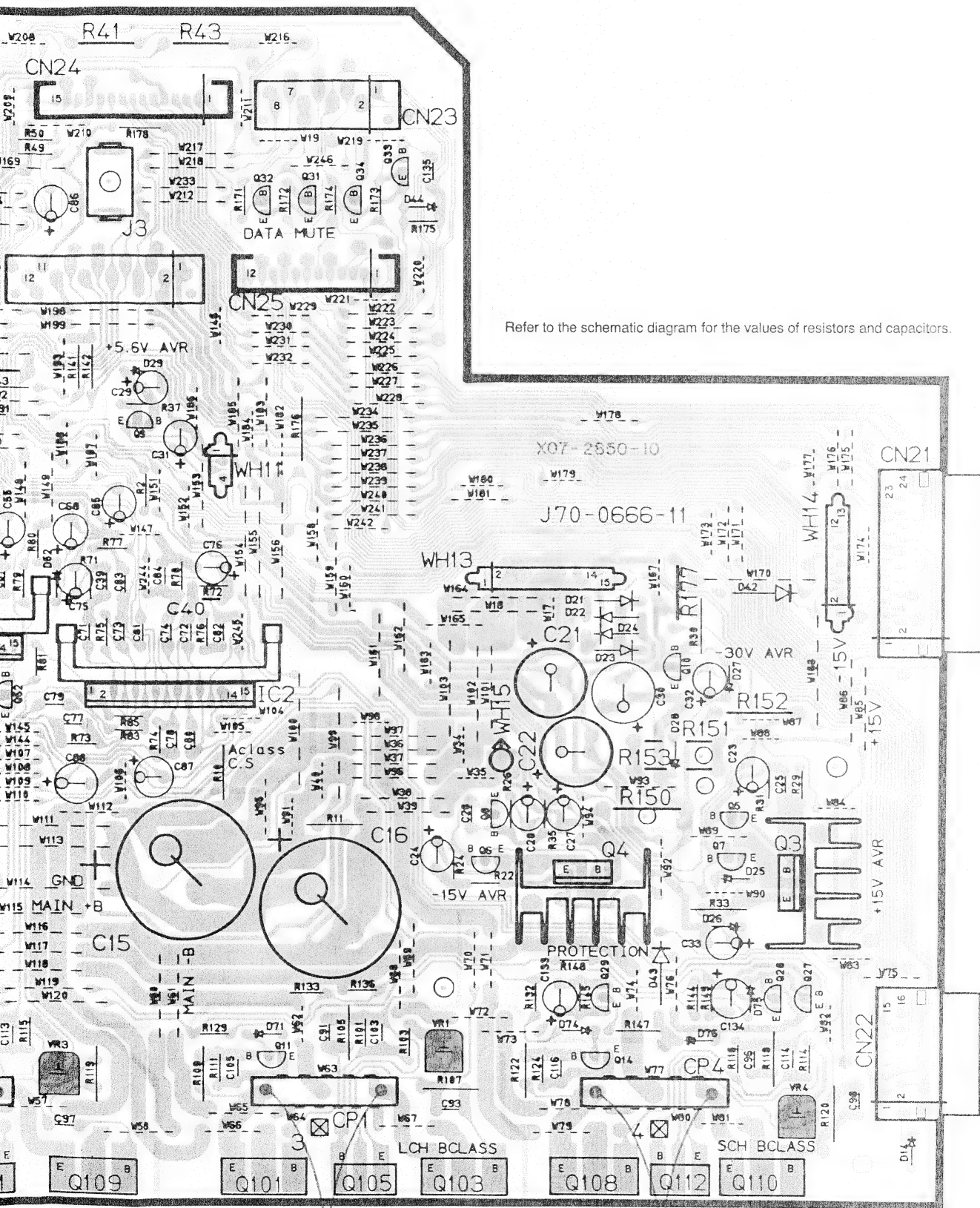
MAIN AMP UNIT (X07-2850-10):KS, PS, -21:MS, -51:TS, -71:XS, 2-71:ES, GS, 2-91:Y'S



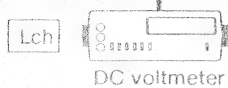
(b) IDLE CURRENT : 22mV

(b) IDLE CURRENT : 22mV

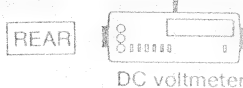




Refer to the schematic diagram for the values of resistors and capacitors.



DC voltmeter



DC voltmeter

## Y

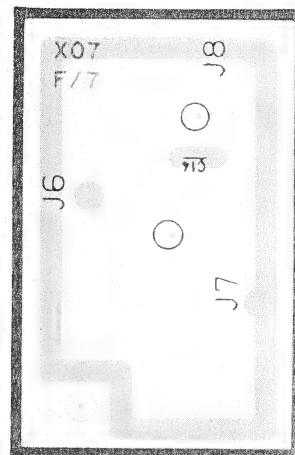
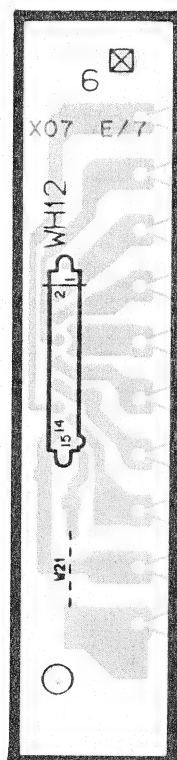
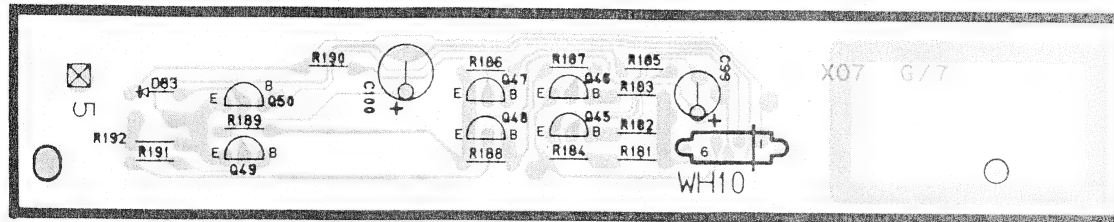
7



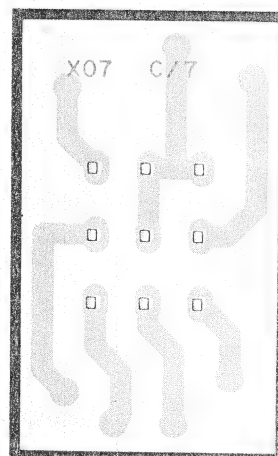
A or B:  
LESS THAN  $8\Omega$

A and B:  $8\Omega$  OR MORE  $\longleftrightarrow$  8 $\Omega$  OR A or B:

2-71:ES, GS, 2-91:YS

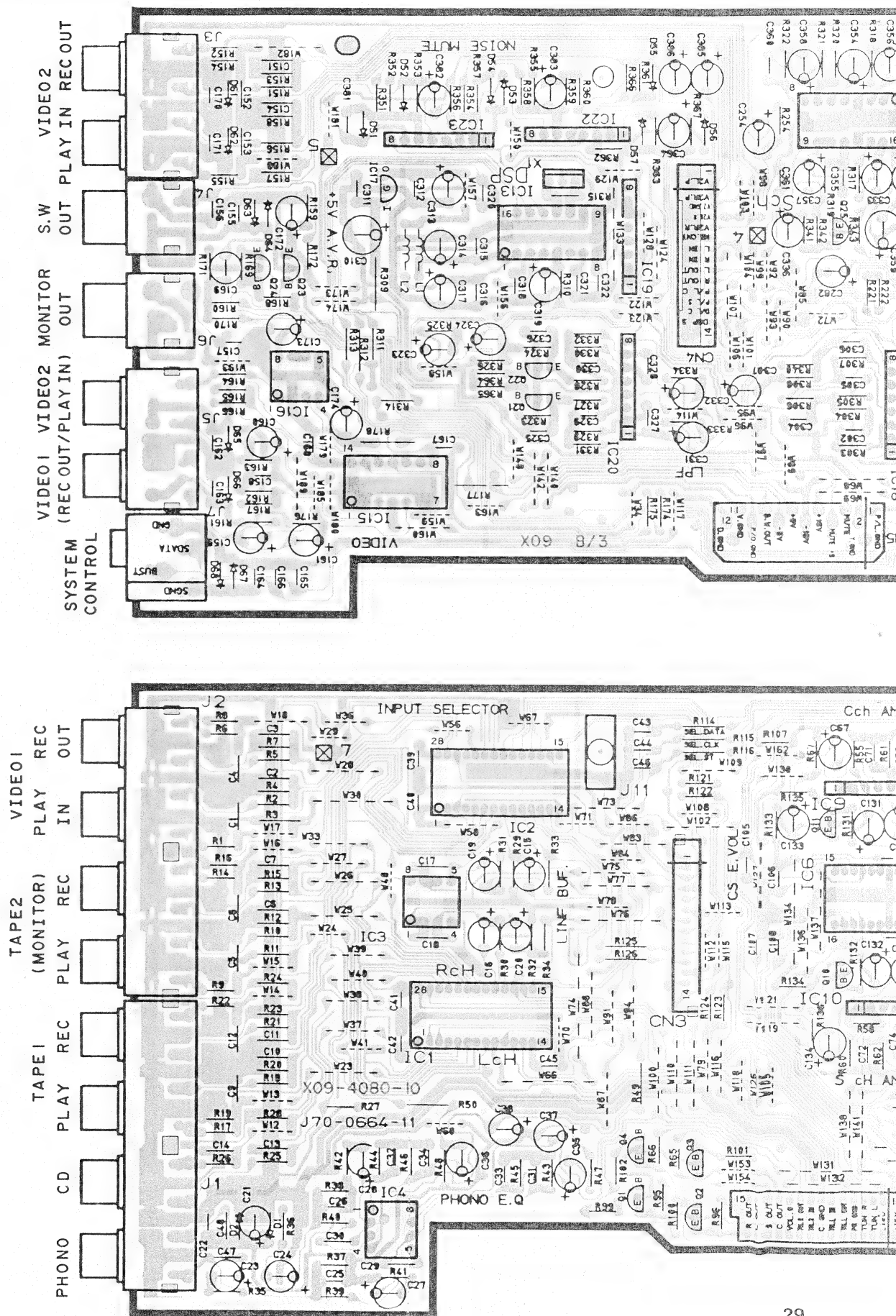


AC110 - 120V ~ ↔ AC220 - 240V ~



### PC BOARD (Component side view)

AUDIO UNIT (X09-4080-10):KS, PS, YS, MS, XS, 2-71:TS, ES, GS





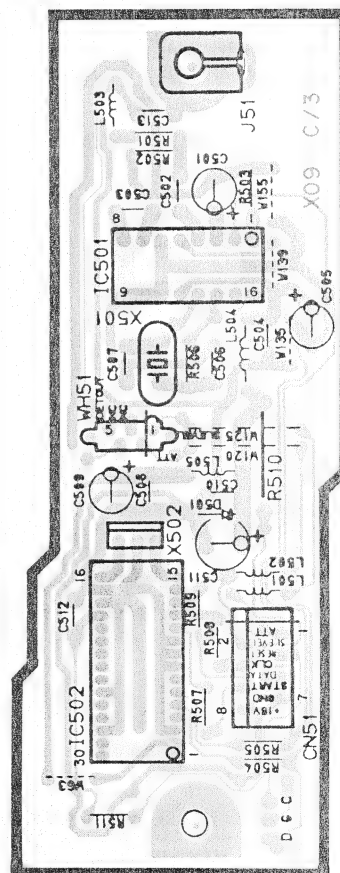
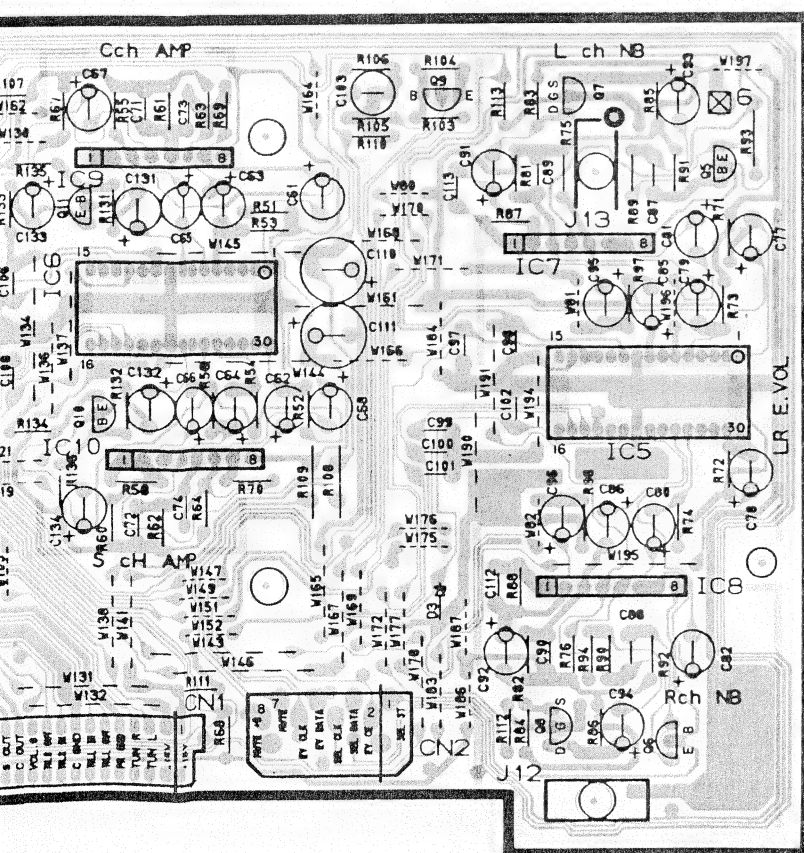
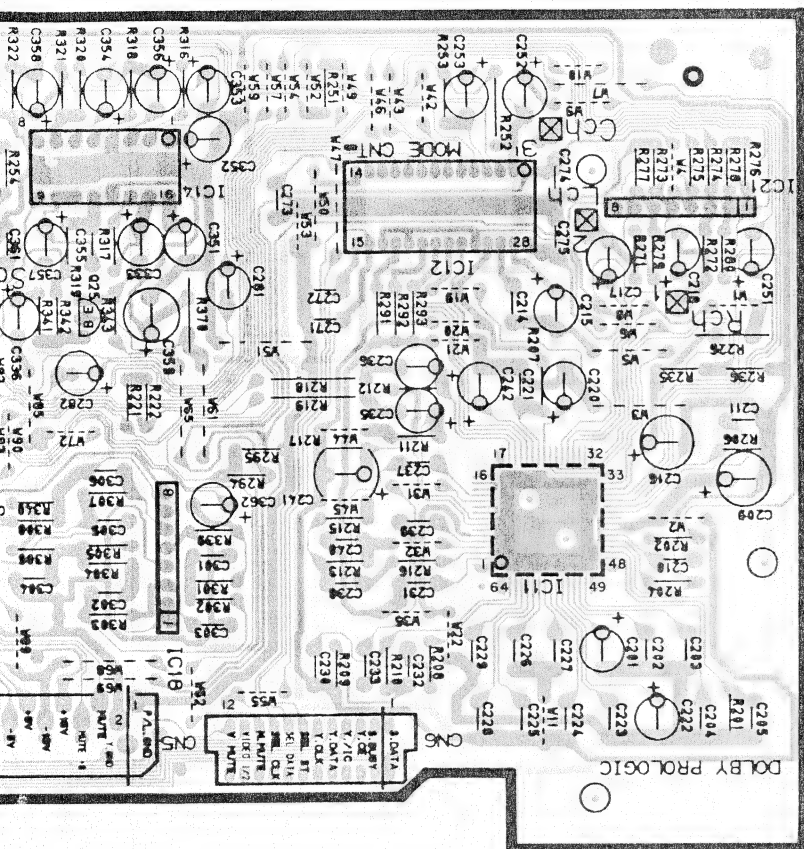
AJ

AK

AL

AM

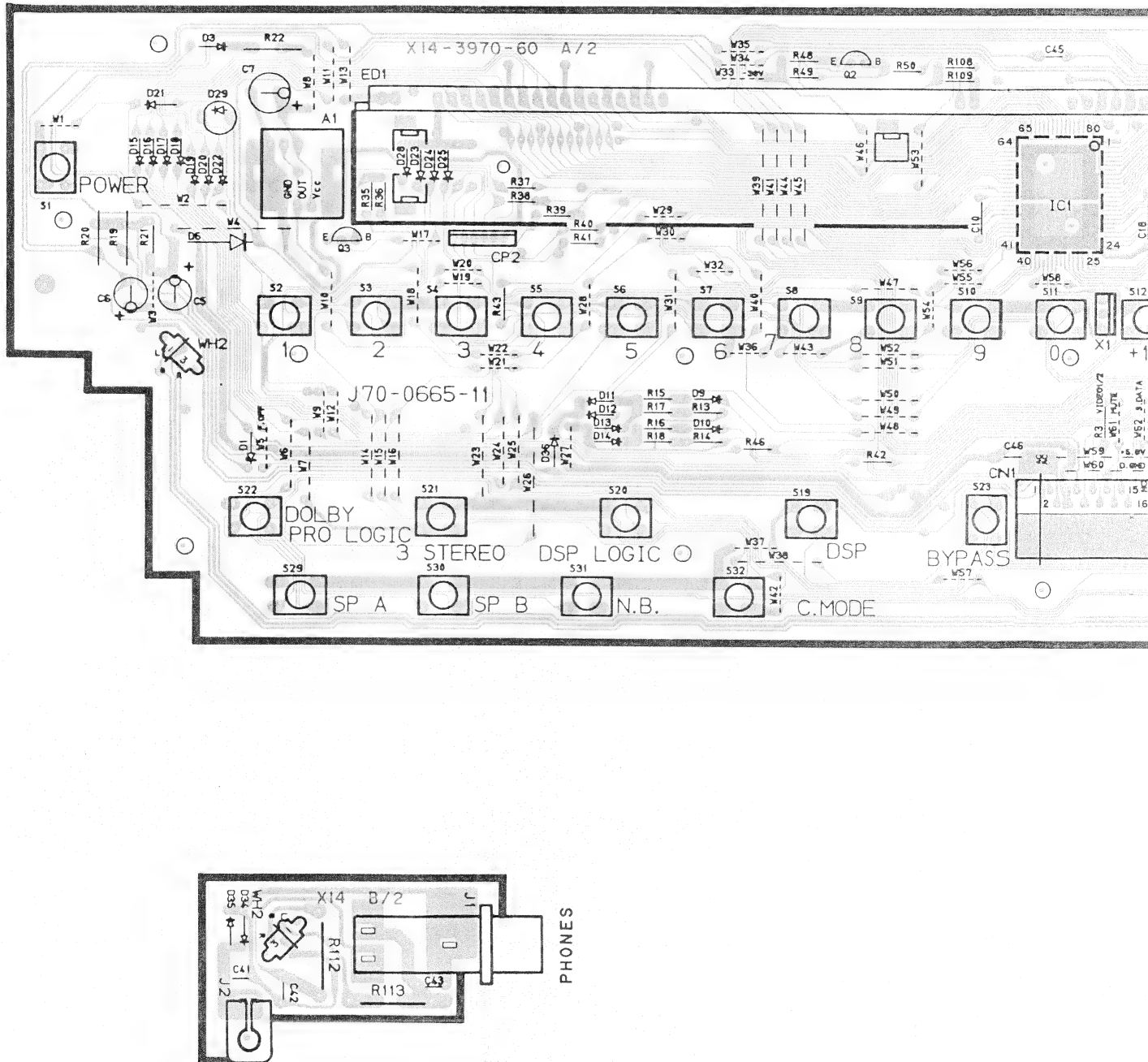
AN



Refer to the schematic diagram for the values of resistors and capacitors.

# PC BOARD (Component side view)

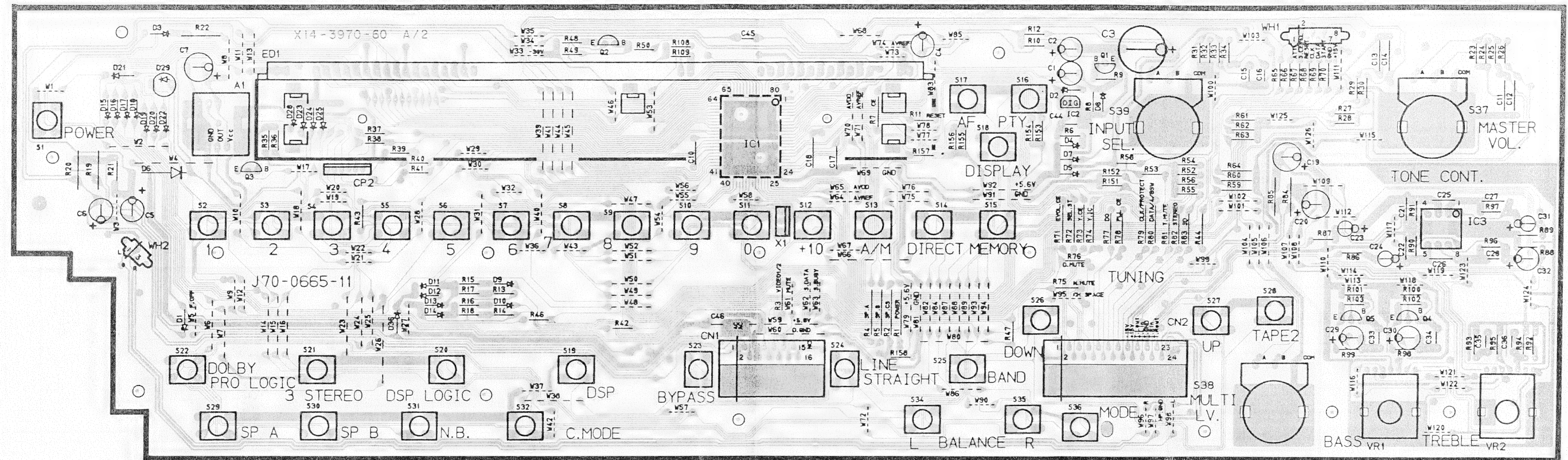
DISPLAY UNIT (X14-3970-10):KS, PS, -21:YS, MS, -71:XS, 2-71:TS, ES, GS



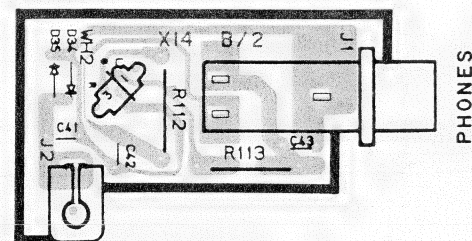


# PC BOARD (Component side view)

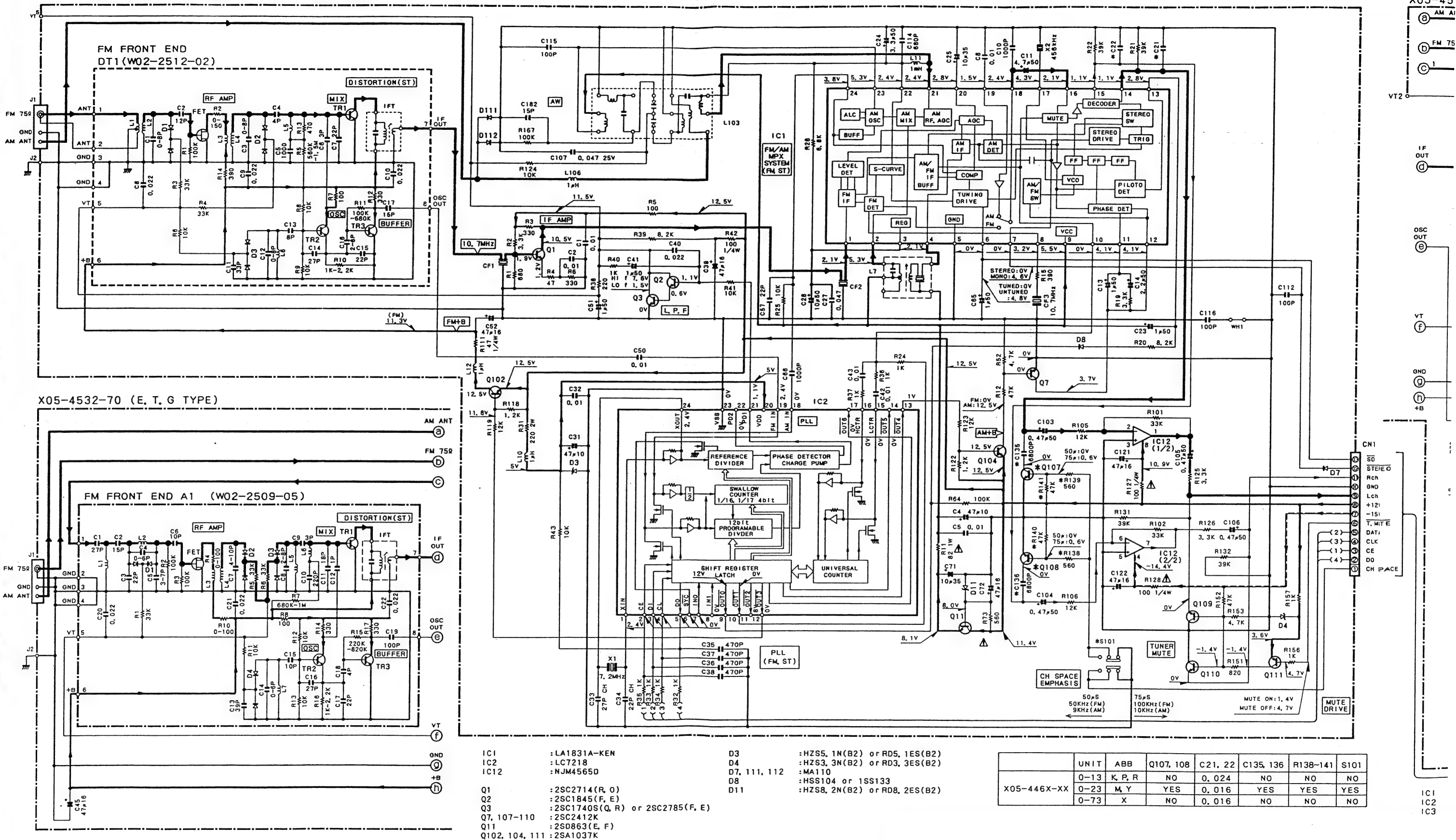
DISPLAY UNIT (X14-3970-10):KS, PS, -21:YS, MS, -71:XS, 2-71:TS, ES, GS



Refer to the schematic diagram for the values of resistors and capacitors.



X05-4460-13(K, P) X05-4460-23(M, Y) X05-4460-73( X )



DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.



J

K

M

N

O

P

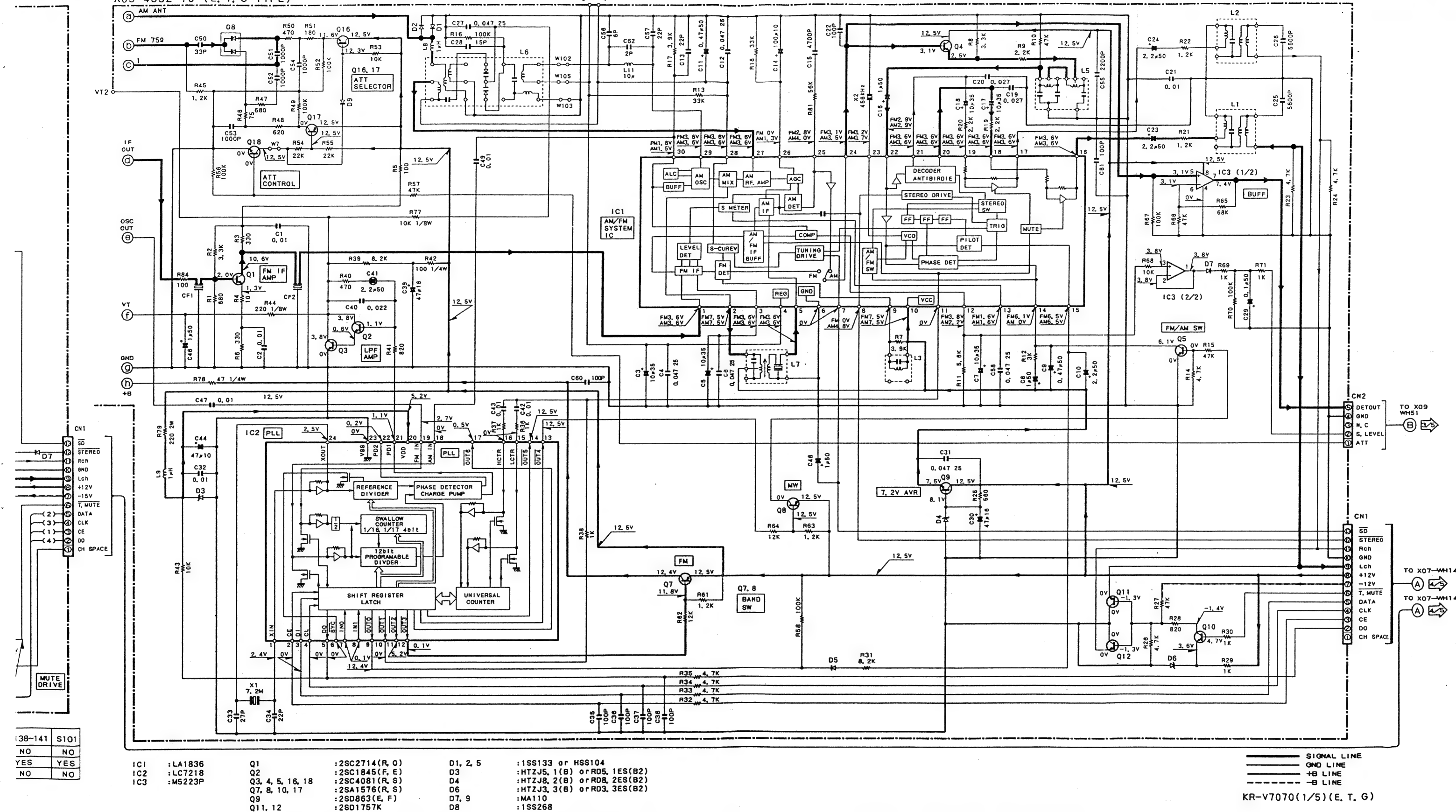
Q

R

S

T

X05-4532-70 (E. T. G TYPE)

FM TUNE  
3 4

KR-V7070(1/5) (E. T. G)

**CAUTION:** For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).  $\Delta$  indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

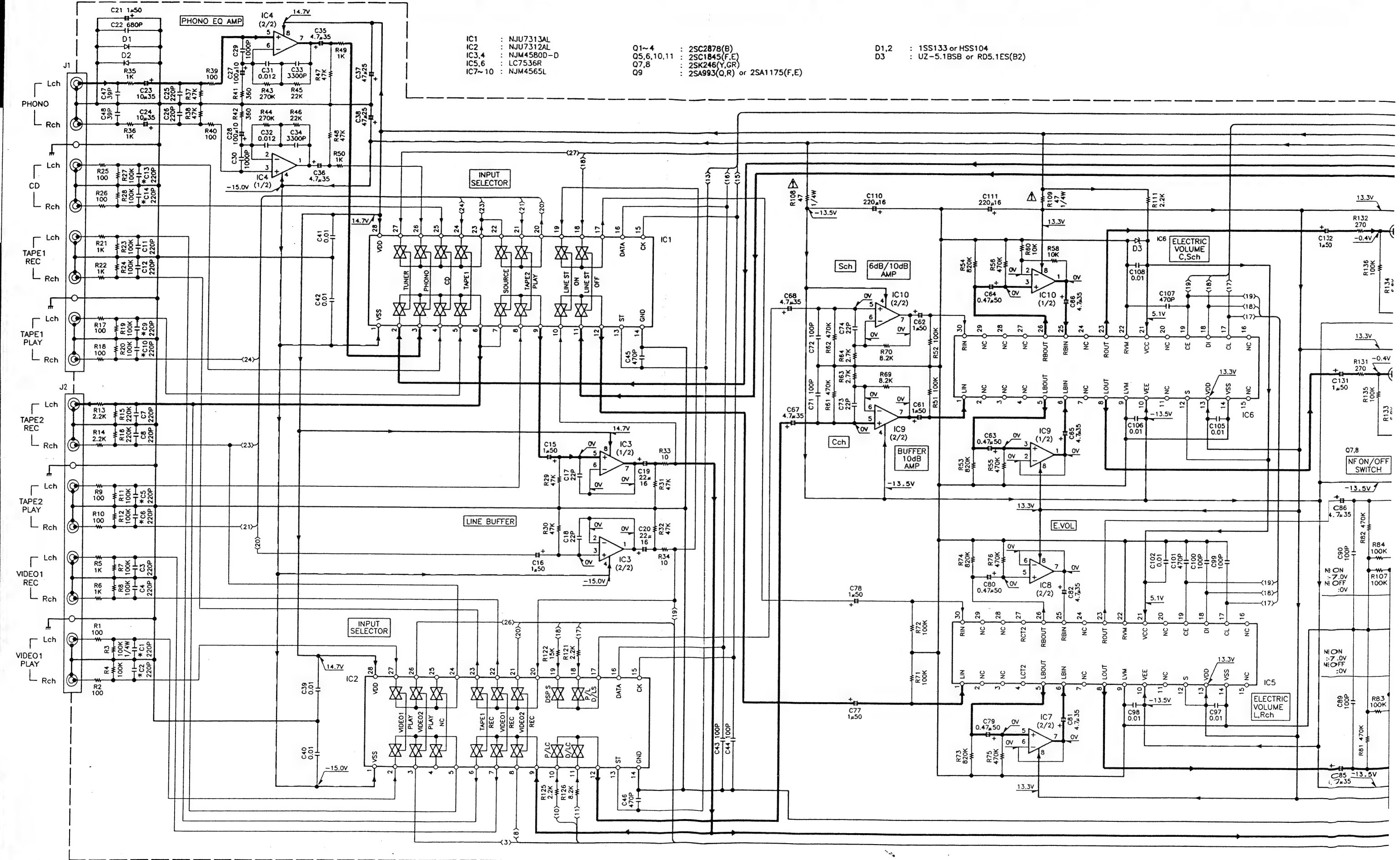
1/5

KR-V7070

KENWOOD

Y05-2960-10

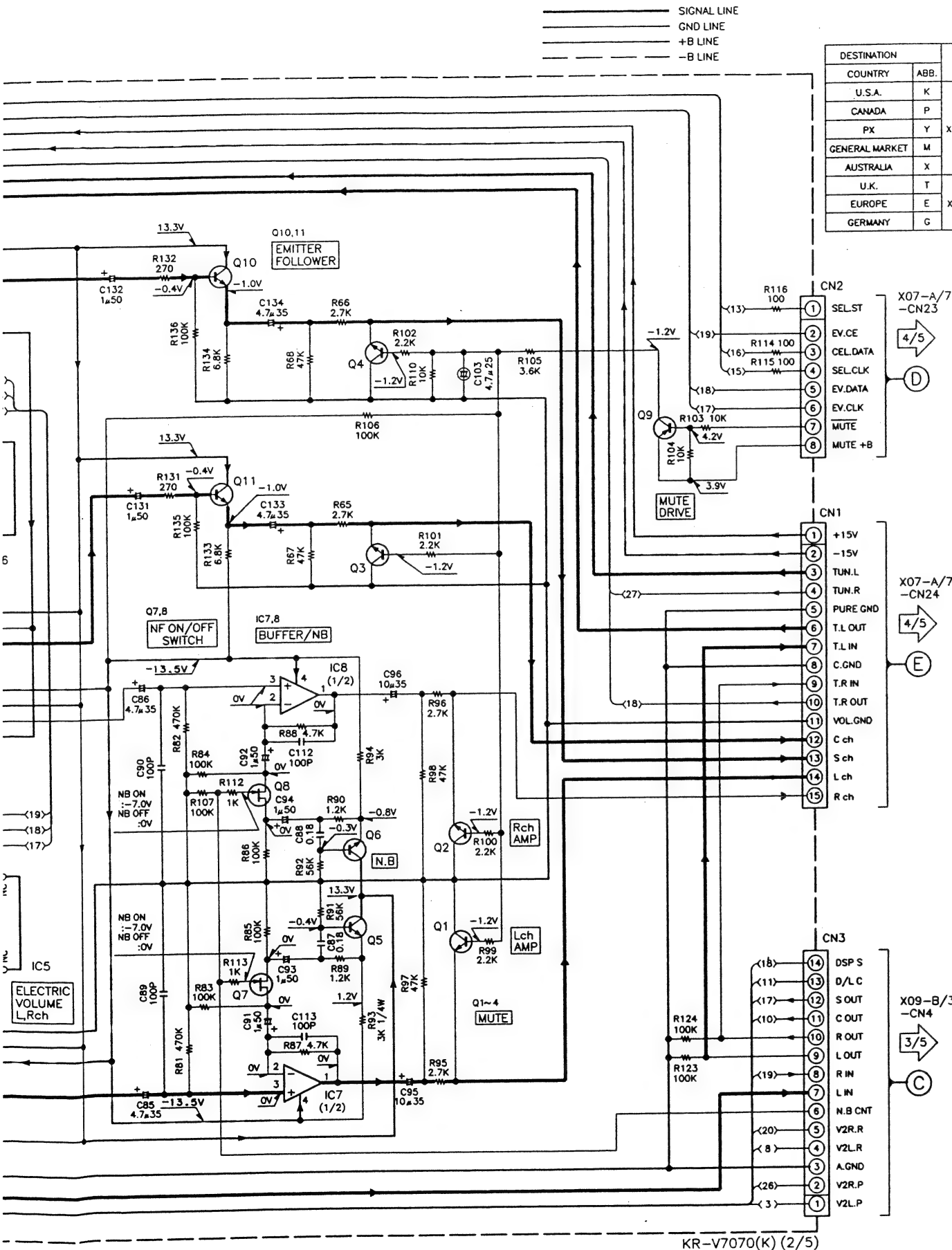
# AUDIO UNIT (X09-4080-10)(A/3)



IC1 : NJU7313AL  
 IC2 : NJU7312AL  
 IC3,4 : NJM4580D-D  
 IC5,6 : LC7536R  
 IC7-10 : NJM4565L  
 Q1-4 : 2SC2878(B)  
 Q5,6,10,11 : 2SC1845(F,E)  
 Q7,8 : 2SK246(Y,GR)  
 Q9 : 2SA993(Q,R) or 2SA1175(F,E)

D1,2 : 1SS133 or HSS104  
 D3 : UZ-5.1BSB or RD5.1ES(B2)

07.8  
 NF ON/OFF SWITCH



DESTINATION		UNIT NAME	C1,2,5,6,9,10,13,14
COUNTRY	ABB.		
U.S.A.	K	X09-4080-10	NO
CANADA	P		
PX	Y		
GENERAL MARKET	M		
AUSTRALIA	X	X09-4082-71	YES
U.K.	T		
EUROPE	E		
GERMANY	G		

2SA1534A  
2SA992  
2SC1845  
2SC2003  
2SC2878  
2SC3940A  
2SD863

2SB1470BT  
2SD2222BT

MC14576CP  
NJM4565D

LA1836  
LC7536R

2SB1370  
2SD2061

NJM2279D

NJM2177AFB3

2SB1560LB  
2SD2390LB

UN4212

SAA6579

NJM072BL  
NJM2082L  
NJM4565L

2SA1175  
2SC2785

2SB1375  
2SD2012  
2SD2374

YM7128B

LC7218

DTC124ES  
2SA933S  
2SC1740S

2SC4137F19

M5233P  
NJM4580D-D

S-80740AL

2SA1037K  
2SA1576  
2SC2412K  
2SC2714  
2SC4081  
2SD1757K

NE571N

UPC78L05J

NJU7311AL  
NJU7312AL  
NJU7313AL

2SK246

DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

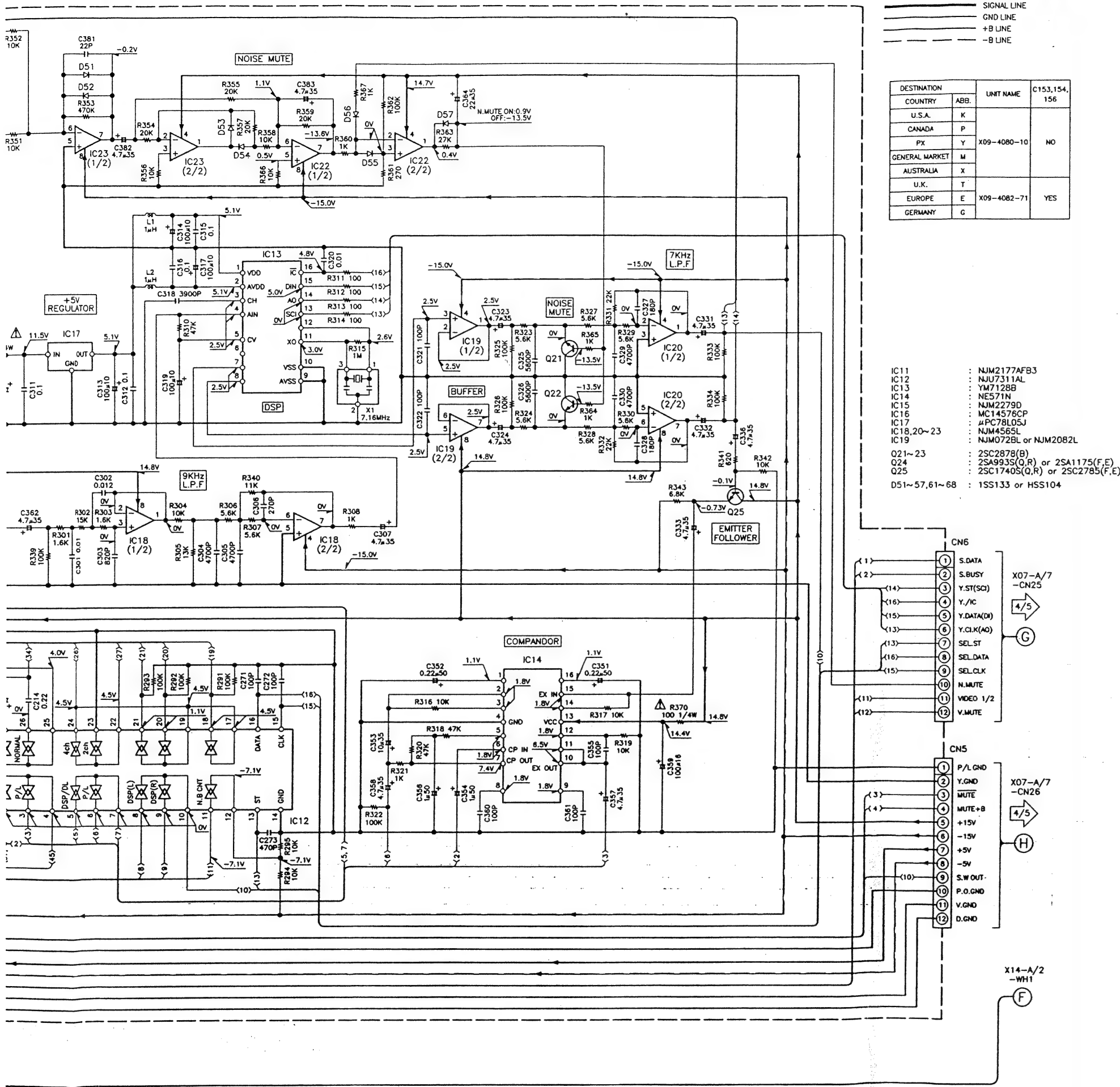
Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.

Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u. U. geringfügig.

CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).  $\Delta$  indicates safety critical components. To reduce the risk of electric shock, leakage current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.







DESTINATION	COUNTRY	ABB.	UNIT NAME	C153,154,156
U.S.A.	K			
CANADA	P			
PX	Y		X09-4080-10	NO
GENERAL MARKET	M			
AUSTRALIA	X			
U.K.	T			
EUROPE	E		X09-4082-71	YES
GERMANY	G			

- IC11 : NJM2177AFB3
- IC12 : NJU7311AL
- IC13 : YM7128B
- IC14 : NE571N
- IC15 : NJM2279D
- IC16 : MC14576CP
- IC17 :  $\mu$ PC78L05J
- IC18,20~23 : NJM4565L
- IC19 : NJM072BL or NJM2082L
- Q21~23 : 2SC2878(B)
- Q24 : 2SA993S(Q,R) or 2SA1175(F,E)
- Q25 : 2SC1740S(Q,R) or 2SC2785(F,E)
- D51~57,61~68 : 1SS133 or HSS104

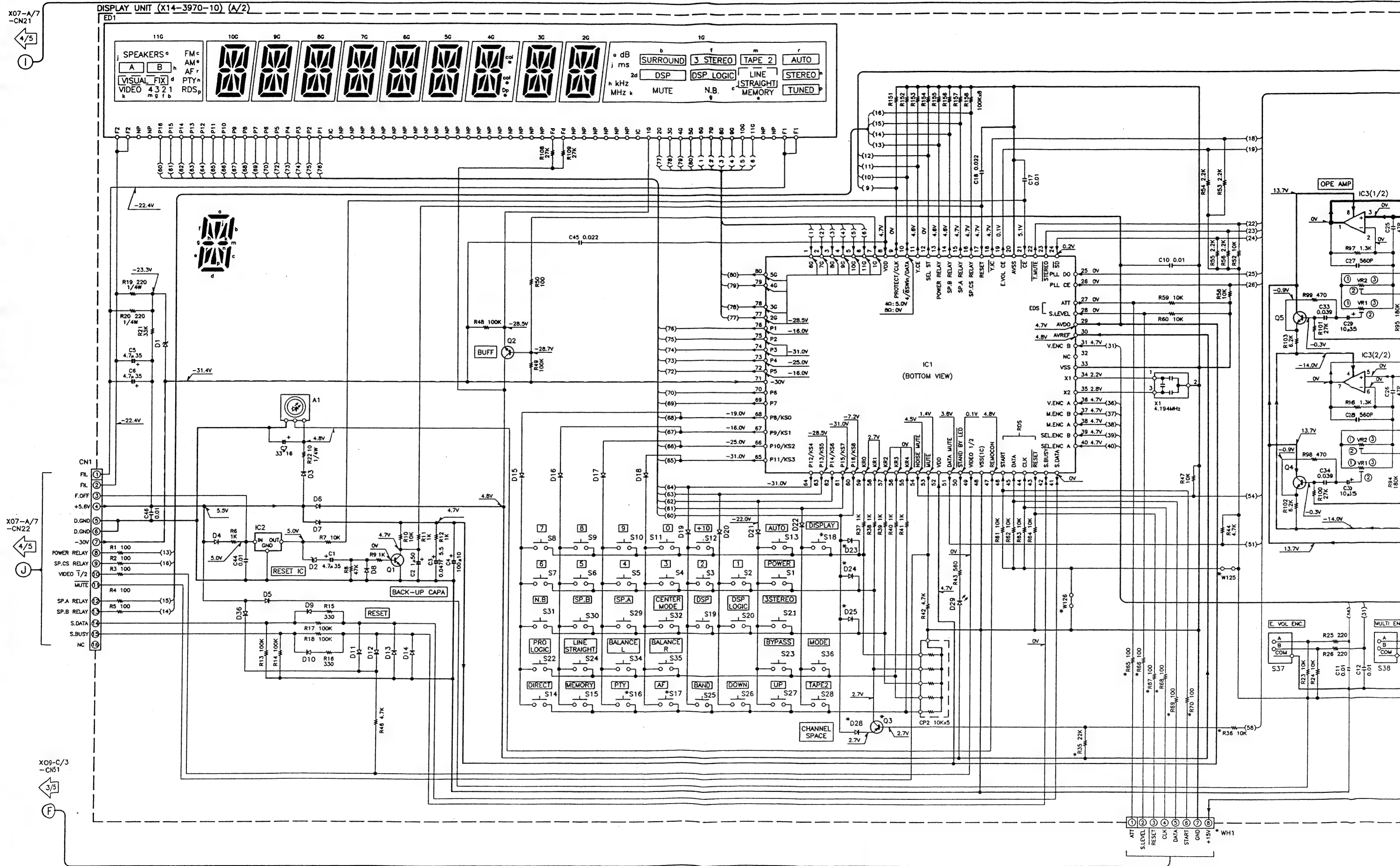
DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

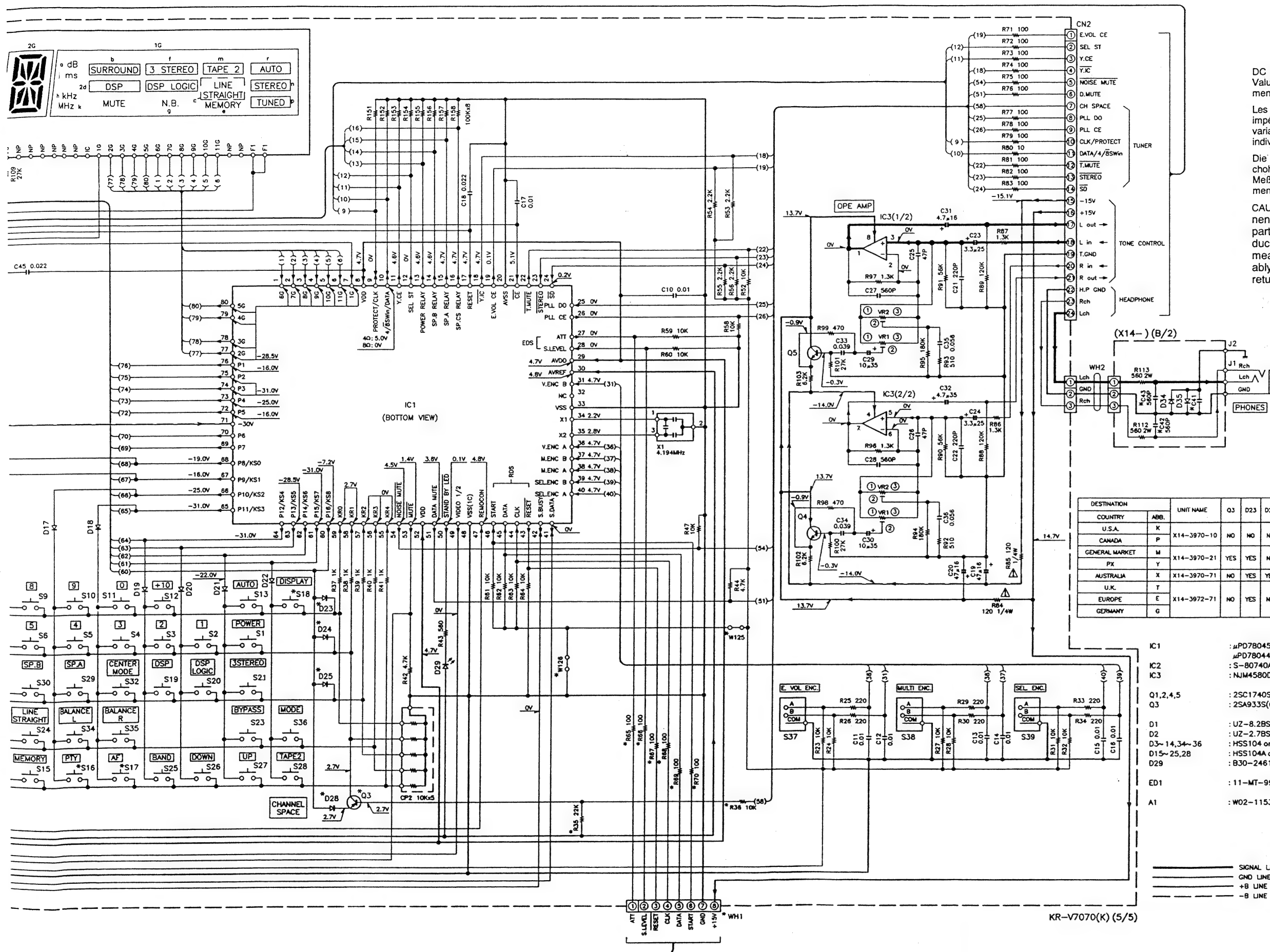
Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.

Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u. U. geringfügig.

CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).  $\Delta$  indicates safety critical components. To reduce the risk of electric shock, leakage current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.







DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.

Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u. U. geringfügig.

CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).  $\Delta$  indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.



\* New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

No.1

Ref. No. 参照番号	Address 位置	New Parts	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
<b>KR-V7070</b>						
601	1A	*	A01-3192-01	METALLIC CABINET		
603	2A	*	A09-0194-08	BATTERY COVER	KPYMX	
606	2A	*	A60-0661-11	PANEL	TEG	
606	2A	*	A60-0722-11	PANEL	KPYMX	
607	2A	*	A70-1008-05	REMOTE CONTROLLER ASSY(-R0704)		
607	2A	*	A70-1009-05	REMOTE CONTROLLER ASSY(-R0705)	TEG	
612	3A	*	B03-2924-13	DRESSING PLATE	KPYMX	
612	3A	*	B03-2925-13	DRESSING PLATE	TEG	
614	3A	*	B43-0287-04	KENWOOD BADGE		
-		*	B46-0092-43	WARRANTY CARD	KY	
-		*	B46-0096-53	WARRANTY CARD	X	
-			B46-0121-33	WARRANTY CARD	P	
-			B46-0197-00	QUESTIONNAIRE CARD	K	
-			B46-0310-03	WARRANTY CARD	TEG	
-			B58-0513-04	CAUTION CARD (PRESET220-240)	Y	
-		*	B58-0964-13	CAUTION CARD (UL)	KY	
-		*	B58-0965-13	CAUTION CARD (P,T,X)	XT	
-		*	B58-0966-13	CAUTION CARD (ELM)	ME	
-		*	B58-0967-03	CAUTION CARD	P	
-		*	B58-0970-13	CAUTION CARD	G	
-		*	B59-1104-00	SERVICE DIRECTORY	Y	
-		*	B60-1870-00	INSTRUCTION MANUAL (ENGLISH)	KPYMX	
-		*	B60-1871-00	INSTRUCTION MANUAL (FRENCH)	P	
-		*	B60-1872-00	INSTRUCTION MANUAL (SPA, CHI)	M	
-		*	B60-1873-00	INSTRUCTION MANUAL (ENGLISH)	TE	
-		*	B60-1874-00	INSTRUCTION MANUAL (FRE, DUT)	E	
-		*	B60-1875-00	INSTRUCTION MANUAL (GERMANY)	EG	
-		*	B60-1877-00	INSTRUCTION MANUAL (ITA, SPA)	E	
-		*	B60-2083-00	INSTRUCTION MANUAL (TAIWANESE)	M	
△ 620	2A		E03-0115-05	AC PLUG ADAPTOR	M	
△ 622	1D		E30-2592-15	AC POWER CORD	MEG	
△ 622	1D		E30-2605-05	AC POWER CORD	Y	
△ 622	1D		E30-2650-05	AC POWER CORD	KP	
△ 622	1D		E30-2717-05	AC POWER CORD	X	
△ 622	1D		E30-2721-05	AC POWER CORD	T	
626	1B		F20-1297-05	INSULATING SHEET		
627	1B	*	F20-1301-04	INSULATING BOARD	T	
628	1C		F20-1322-05	INSULATING BOARD		
630	1A		F20-1433-03	INSULATING BOARD	M	
633	2C	*	G11-2191-04	CUSHION		
-		*	H50-1317-14	ITEM CARTON CASE	KPYXEG	
-		*	H50-1318-14	ITEM CARTON CASE	M	
-		*	H50-1320-14	ITEM CARTON CASE	T	
-		*	H10-5915-02	POLYSTYRENE FOAMED FIXTURE(L)	KPYMXE	
-		*	H10-5915-02	POLYSTYRENE FOAMED FIXTURE(L)	G	
-		*	H10-5916-12	POLYSTYRENE FOAMED FIXTURE(R)	KPYMXE	
-		*	H10-5916-12	POLYSTYRENE FOAMED FIXTURE(R)	G	
-			H10-5917-02	POLYSTYRENE FOAMED FIXTURE(L)	T	
-			H10-5918-02	POLYSTYRENE FOAMED FIXTURE(R)	T	
-			H13-0147-14	CARTON BOARD	X	

L: Scandinavia

K: USA

P: Canada

R: Mexico

Y: PX (Far East, Hawaii)

T: England

E: Europe

G: Germany

Y: AAFES (Europe)

X: Australia

M: Other Areas

△ indicates safety critical components

## TUNER UNIT

UNIT NO.	Destination
X05-4460-13	KS, PS
X05-4460-23	YS, MS
X05-4460-73	XS

## TUNER UNIT

UNIT NO.	Destination
X05-4532-70	TS, ES, GS

## MAIN AMP UNIT

UNIT NO.	Destination
X07-2850-10	KS, PS
X07-2850-21	MS
X07-2850-51	TS
X07-2850-71	XS
X07-2852-71	ES, GS
X07-2852-91	YS

## AUDIO UNIT

UNIT NO.	Destination
X09-4080-10	KS, PS, YS, MS, XS
X09-4082-71	TS, ES, GS

## DISPLAY UNIT

UNIT NO.	Destination
X14-3970-10	KS, PS
X14-3970-21	YS, MS
X14-3970-71	XS
X14-3972-71	TS, ES, GS

KR-V7070

PARTS LIST



\* New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

No.2

Ref. No. 参照番号	Address 位置	New 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
-			H25-0232-04	PROTECTION BAG (235X350X0.03)	KPYMXE	
-			H25-0232-04	PROTECTION BAG (235X350X0.03)	G	
-			H25-0651-04	PROTECTION BAG (0232 PRINTED)	T	
-			H25-1516-04	PROTECTION BAG		
635	3C	*	J02-1122-05	FOOT (46mm)		
636	2C		J19-2536-05	UNIT HOLDER		
637	2D, 3D		J19-3324-15	UNIT HOLDER		
638	1B		J19-3329-05	UNIT HOLDER		
639	2C	*	J19-3752-14	UNIT HOLDER		
640	2A		J19-3645-05	LOOP ANTENNA STAND		
646	1D		J42-0083-05	POWER CORD BUSHING		
-			J61-0307-05	WIRE BAND		
650	3A		K29-5851-04	KN0B (VOLUME CONTROL)		
651	2A, 2B		K29-6039-02	KN0B (POWER/10KEY/RDS)		
652	3B		K29-6041-04	KN0B (BASS, TREBLE)		
653	3A		K29-6042-04	KN0B (MULTI LEVEL CONTROL)		
654	3A		K29-6043-04	KN0B (INPUT SELECTOR)		
655	3B	*	K29-6045-02	KN0B		
657	2B	*	L07-1842-05	POWER TRANSFORMER	KP	
657	2B	*	L07-1844-05	POWER TRANSFORMER	YM	
657	2B	*	L07-1845-05	POWER TRANSFORMER	X	
657	2B	*	L07-1846-05	POWER TRANSFORMER	TEG	
A	1D		N08-0128-35	BINDING POST (GND)	YMXTEG	
B	1C, 2C		N09-0333-05	TAPPING SCREW (3X12)		
C	1B, 1C		N09-3139-05	TAPTITE SCREW (3X14)		
D	1C		N29-0216-05	RIVET		
E	2D, 3D		N29-0265-15	PUSH RIVET		
F	1A		N29-0277-05	PUSH RIVET	M	
H	2B, 3B		N82-2608-46	BINDING HEAD TAPTITE SCREW		
J	1B		N86-3006-46	BINDING HEAD TAPTITE SCREW		
K	1D		N89-3008-41	BINDING HEAD TAPTITE SCREW	KP	
L	1D, 3B		N89-3008-45	BINDING HEAD TAPTITE SCREW		
M	1C, 2D		N89-3008-46	BINDING HEAD TAPTITE SCREW		
N	1C, 3C		N89-3023-46	BINDING HEAD TAPTITE SCREW		
670	1D	*	T49-0025-02	MOTOR ASSY		
671	2A		T90-0195-05	LOOP ANTENNA ASSY		
672	2A		T90-0198-05	ANTENNA ADAPTOR		
673	2A		T90-0801-05	LEAD WIRE ANTENNA		
<b>TUNER UNIT (X05-4460-XX)</b>						
C1, 2			CK73FB1H103K	CHIP C 0.010UF K	KPYMX	
C4			CE04LW1A470M	ELECTRO 47UF 10WV	KPYMX	
C5			CK73FB1H103K	CHIP C 0.010UF K	KPYMX	
C8			CK73FB1H103K	CHIP C 0.010UF K	KPYMX	
C10			CK73FB1H102K	CHIP C 1000PF K	KPYMX	
C11			CE04LW1H47M	ELECTRO 4.7UF 50WV	KPYMX	
C13			CE04LW1H010M	ELECTRO 1.0UF 50WV	KPYMX	
C14			CE04LW1H2R2M	ELECTRO 2.2UF 50WV	KPYMX	
C21, 22			CQ92FM1H163J	MYLAR 0.016UF J	YMX	
C21, 22			CQ92FM1H243J	MYLAR 0.024UF J	KP	
C23			CE04LW1H010M	ELECTRO 1.0UF 50WV	KPYMX	
C24			CE04LW1H3R3M	ELECTRO 3.3UF 50WV	KPYMX	
C25			CE04LW1V100M	ELECTRO 10UF 35WV	KPYMX	
C27			CK73FB1E473K	CHIP C 0.047UF K	KPYMX	

L: Scandinavia

K: USA

P: Canada

R: Mexico

Y: PX (Far East, Hawaii)

T: England

E: Europe

G: Germany

Y: AAFES (Europe)

X: Australia

M: Other Areas

△ indicates safety critical components

\* New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

No.3

Ref. No. 参照番号	Address 位置	New 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
C28			CE04LW1V100M	ELECTRO 10UF 35WV	KPYMX	
C31			CE04LW1A470M	ELECTRO 47UF 10WV	KPYMX	
C32			CK73FB1H103K	CHIP C 0.010UF K	KPYMX	
C33			CC73FCH1H270J	CHIP C 27PF J	KPYMX	
C34			CC73FCH1H220J	CHIP C 22PF J	KPYMX	
C35 -38			CK73FB1H471K	CHIP C 470PF K	KPYMX	
C39			CE04LW1C470M	ELECTRO 47UF 16WV	KPYMX	
C40			CK73FB1H223K	CHIP C 0.022UF K	KPYMX	
C41			CE04LW1H010M	ELECTRO 1.0UF 50WV	KPYMX	
C42, 43			CK73FB1H103K	CHIP C 0.010UF K	KPYMX	
C50			C91-0769-05	CERAMIC 0.010UF K	KPYMX	
C51			CE04LW1H010M	ELECTRO 1.0UF 50WV	KPYMX	
C52			CE04LW1C470M	ELECTRO 47UF 16WV	KPYMX	
C57			CC73FSL1H220J	CHIP C 22PF J	KPYMX	
C65			CE04LW1H010M	ELECTRO 1.0UF 50WV	KPYMX	
C66			CK73FB1H102K	CHIP C 1000PF K	KPYMX	
C71			CE04LW1V100M	ELECTRO 10UF 35WV	KPYMX	
C72			CE04LW1C470M	ELECTRO 47UF 16WV	KPYMX	
C103-106			CE04LW1H47M	ELECTRO 0.47UF 50WV	KPYMX	
C107			CK73FB1E473K	CHIP C 0.047UF K	KPYMX	
C112			CC73FSL1H101J	CHIP C 100PF J	KPYMX	
C114			CK73FB1H681K	CHIP C 680PF K	KPYMX	
C115, 116			CC73FSL1H101J	CHIP C 100PF J	KPYMX	
C121, 122			CE04LW1C470M	ELECTRO 47UF 16WV	KPYMX	
C135, 136			CQ92FM1H682J	MYLAR 6800PF J	YM	
C182			CC73FSL1H150J	CHIP C 15PF J	KPYMX	
J1			E20-0321-05	LOCK TERMINAL BOARD ANTENNA	KPYMX	
CF1, 2			L72-0531-05	CERAMIC FILTER	KPYMX	
CF3			L72-0574-05	CERAMIC FILTER	KPYMX	
L7			L30-0467-05	AM IFT	KPYMX	
L10			L40-1091-17	SMALL FIXED INDUCTOR(1UH)	KPYMX	
L11			L40-1021-14	SMALL FIXED INDUCTOR(1.0MH,K)	KPYMX	
L12			L40-1091-17	SMALL FIXED INDUCTOR(1UH)	KPYMX	
L103			L39-1328-05	COMBINATION COIL	KPYMX	
L106			L40-1091-17	SMALL FIXED INDUCTOR(1UH)	KPYMX	
X1			L77-1122-05	CRYSTAL RESONATOR(7.2MHz)	KPYMX	
X2			L78-0295-05	RESONATOR (456kHz)	KPYMX	
R11			RS14KB3A820J	FL-PROOF RS 82 J 1W	KPYMX	
R31			RS14KB3D221J	FL-PROOF RS 220 J 2W	KPYMX	
R42			RD14NB2E101J	RD 100 J 1/4W	KPYMX	
R111			RD14NB2E470J	RD 47 J 1/4W	KPYMX	
R127, 128			RD14NB2E101J	RD 100 J 1/4W	KPYMX	
W46			R92-0670-05	CHIP R 0 OHM	KPYMX	
W48			R92-0670-05	CHIP R 0 OHM	KPYMX	
S101			S62-0034-05	SLIDE SWITCH CHANNEL SPACE	YM	
D3			HZS5.1N(B2)	ZENER DIODE	KPYMX	
D3			RD5.1ES(B2)	ZENER DIODE	KPYMX	
D4			HZS3.3N(B2)	ZENER DIODE	KPYMX	
D4			RD3.3ES(B2)	ZENER DIODE	KPYMX	
D7			MA110	DIODE	KPYMX	

L: Scandinavia

K: USA

P: Canada

R: Mexico

Y: PX (Far East, Hawaii)

T: England

E: Europe

G: Germany

Y: AAFES (Europe)

X: Australia

M: Other Areas

△ indicates safety critical components

PARTS LIST

KR-V7070

\* New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

## No.4

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕 向	Re- marks 備考
D8 D8 D11 D11 D11,112			HSS104 1SS133 HZS8,2N(B2) R08,2ES(B2) MA110	DIODE DIODE ZENER DIODE ZENER DIODE DIODE	KPYMX KPYMX KPYMX KPYMX KPYMX	
IC1 IC2 IC12 Q1 Q2			LA1831A-KEN LC7218 NJM4565D 2SC2714(R,Θ) 2SC1845(F,E)	ANALOGUE IC IC(PLL SYNTHESIZER) IC(OP AMP X2) TRANSISTOR TRANSISTOR	KPYMX KPYMX KPYMX KPYMX KPYMX	
Q3 Q3 Q7 Q11 Q102			2SC1740S(Q,R) 2SC2785(F,E) 2SC2412K 2SD863(E,F) 2SA1037K	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	KPYMX KPYMX KPYMX KPYMX KPYMX	
Q104 Q107-110 Q109,110 Q111			2SA1037K 2SC2412K 2SC2412K 2SA1037K	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	KPYMX KPYMX KPYMX KPYMX	
DT1			W02-2512-05	FM FRONT-END ASSY	KPYMX	
<b>TUNER UNIT (X05-4532-70)</b>						
C1 ,2 C3 C4 C5 C6			CK73FB1H103K CE04LW1V100M CK73FB1E473K CE04LW1V100M CK73FB1E473K	CHIP C ELECTRO CHIP C ELECTRO CHIP C	0.010UF K 10UF 35WV 0.047UF K 10UF 35WV 0.047UF K	TEG TEG TEG TEG TEG
C7 C8 C9 C10 C11			CE04LW1V100M CE04LW1H010M CE04LW1HR47M CE04LW1H2R2M CE04LW1HR47M	ELECTRO ELECTRO ELECTRO ELECTRO ELECTRO	10UF 35WV 1.0UF 50WV 0.47UF 50WV 2.2UF 50WV 0.47UF 50WV	TEG TEG TEG TEG TEG
C12 C13 C14 C15 C16			CK73FB1E473K CC73FCH1H220J CE04LW1A101M CK73FB1H472K CE04LW1H010M	CHIP C CHIP C ELECTRO CHIP C ELECTRO	0.047UF K 22PF J 100UF 10WV 4700PF K 1.0UF 50WV	TEG TEG TEG TEG TEG
C17 ,18 C19 ,20 C21 C22 C23 ,24			CE04LW1V100M CQ92FM1H273J CK73FB1H103K CC73FSL1H101J CE04LW1H2R2M	ELECTRO MYLAR CHIP C CHIP C ELECTRO	10UF 35WV 0.027UF J 0.010UF K 100PF J 2.2UF 50WV	TEG TEG TEG TEG TEG
C25 ,26 C27 C28 C29 C30			CK73FB1H562K CK73FB1E473K CC73FSL1H150J CE04LW1H0R1M CE04LW1C470M	CHIP C CHIP C CHIP C ELECTRO ELECTRO	5600PF K 0.047UF K 15PF J 0.1UF 50WV 47UF 16WV	TEG TEG TEG TEG TEG
C31 C32 C33 C34 C35 -38			CK73FB1E473K CK73FB1H103K CC73FCH1H270J CC73FCH1H220J CC73FSL1H101J	CHIP C CHIP C CHIP C CHIP C CHIP C	0.047UF K 0.010UF K 27PF J 22PF J 100PF J	TEG TEG TEG TEG TEG
C39 C40 C41			CE04LW1C470M CQ92FM1H273J CE04HW1H2R2M	ELECTRO MYLAR NP-ELEC	47UF 16WV 0.022UF J 2.2UF 50WV	TEG TEG TEG

L: Scandinavia K: USA P: Canada R: Mexico  
Y: PX (Far East, Hawaii) T: England E: Europe G: Germany  
Y: AAFES (Europe) X: Australia M: Other Areas

⚠ indicates safety critical components

\* New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

## No.5

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕 向	Re- marks 備考
C42 ,43 C44 C45 C46 C47			CK73FB1H103K CE04LW1A470M CE04LW1C470M CE04LW1H010M CK73FB1H103K	CHIP C ELECTRO ELECTRO ELECTRO CHIP C	0.010UF K 47UF 10WV 47UF 16WV 1.0UF 50WV 0.010UF K	TEG TEG TEG TEG TEG
C48 C49 C50 C51 -54 C55			CE04LW1H010M CK73FB1H103K CC73FCH1H330J CK73FB1H102K CK73FB1H222K	ELECTRO CHIP C CHIP C CHIP C CHIP C	1.0UF 50WV 0.010UF K 33PF J 1000PF K 2200PF K	TEG TEG TEG TEG TEG
C56 C57 C58 C60 C61			CC73FCH1H060D CC73FCH1H220J CK73FB1E473K CC73FSL1H101J C91-0745-05	CHIP C CHIP C CHIP C CHIP C CERAMIC	6.0PF D 22PF J 0.047UF K 100PF J 100PF K	TEG TEG TEG TEG TEG
C62			CC45FSL1H020C	CERAMIC	2.0PF C	TEG
J1			E20-0321-05	LOCK TERMINAL BOARD ANTENNA		TEG
CF1 ,2 L1 ,2 L3 L5 L6			L72-0536-05 L79-1219-05 L30-0910-05 L79-0125-05 L39-1328-05	CERAMIC FILTER LC FILTER FM IFT LC FILTER COMBINATION COIL		TEG TEG TEG TEG TEG
L7 L8 ,9 L11 X1 X2			L30-0467-05 L40-1091-17 L40-1001-17 L77-1122-05 L78-0295-05	AM IFT SMALL FIXED INDUCTOR(10UH) SMALL FIXED INDUCTOR(10UH,K) CRYSTAL RESONATOR(7.2MHz) RESONATOR (456kHz)		TEG TEG TEG TEG TEG
R42 R78 R79 W101-106 W108-112			RD14NB2E101J RD14NB2E470J RS14KB3D221J R92-0670-05 R92-0670-05	RD RD FL-PROOF RS CHIP R CHIP R	100 J 1/4W 47 J 1/4W 220 J 2W 0 OHM 0 OHM	TEG TEG TEG TEG TEG
W114-119 W121,122 W201-203 W207,208			R92-0670-05 R92-0670-05 R92-0679-05 R92-0679-05	CHIP R CHIP R CHIP R CHIP R	0 OHM 0 OHM 0 OHM 0 OHM	TEG TEG TEG TEG
D1 ,2 D1 ,2 D3 D3 D4			HSS104 1SS133 MTZJ5,1(B) R05,1ES(B2) MTZJ8,2(B)	DIODE DIODE ZENER DIODE ZENER DIODE ZENER DIODE		TEG TEG TEG TEG TEG
D4 D5 D5 D6 D6			R08,2ES(B2) HSS104 1SS133 MTZJ3,3(B) RD3,3ES(B2)	ZENER DIODE DIODE DIODE ZENER DIODE ZENER DIODE		TEG TEG TEG TEG TEG
D7 D8 D9 IC1 IC2			MA110 1SS268 MA110 LA1836 LC7218	DIODE DIODE DIODE ANALOGUE IC IC(PLL SYNTHESIZER)		TEG TEG TEG TEG TEG

L: Scandinavia K: USA P: Canada R: Mexico  
Y: PX (Far East, Hawaii) T: England E: Europe G: Germany  
Y: AAFES (Europe) X: Australia M: Other Areas

⚠ indicates safety critical components

KR-V7070

PARTS LIST

× New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

No.6

Ref. No. 参照番号	Address 位置	New Parts	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
IC3			M5223P	IC(OP AMP X2)	TEG	
Q1			2SC2714(R,Θ)	TRANSISTOR	TEG	
Q2			2SC1845(F,E)	TRANSISTOR	TEG	
Q3 -5			2SC4081(R,S)	TRANSISTOR	TEG	
Q7 ,8			2SA1576(R,S)	TRANSISTOR	TEG	
Q9			2SD863(E,F)	TRANSISTOR	TEG	
Q10			2SA1576(R,S)	TRANSISTOR	TEG	
Q11 ,12			2SD1757K	TRANSISTOR	TEG	
Q16			2SC4081(R,S)	TRANSISTOR	TEG	
Q17			2SA1576(R,S)	TRANSISTOR	TEG	
Q18			2SC4081(R,S)	TRANSISTOR	TEG	
A1			W02-2509-05	FM FRONT-END ASSY	TEG	
<b>MAIN AMP UNIT (X07-285X-XX)</b>						
△ C1			C91-1488-05	MF 6800PF 250VAC		
C2			CK45FF1H103Z	CERAMIC 0.010UF Z		
C3			CE04LW1V4R7M	ELECTRO 4.7UF 35WV		
C4			CE04LW1E102M	ELECTRO 1000UF 25WV		
C5			CK45FF1H223Z	CERAMIC 0.022UF Z		
△ C6 ,7			CK45FF1H103Z	CERAMIC 0.010UF Z		
C8 ,9			CK45FE2H103P	CERAMIC 0.010UF P		
C10 ,11			CK45FF1H103Z	CERAMIC 0.010UF Z		
C12			CE04LW1C331M	ELECTRO 330UF 16WV		
C13			CK45FB1H102K	CERAMIC 1000PF K		
C14			CK45FF1H473Z	CERAMIC 0.047UF Z	KP	
C15 ,16			C90-3536-05	ELECTRO 6800UF 71WV		
C21 ,22			CE04LW1V102M	ELECTRO 1000UF 35WV		
C23 ,24			CE04LW1C470M	ELECTRO 47UF 16WV		
C25 ,26			CK45FB1H102K	CERAMIC 1000PF K		
C27 ,28			CE04LW1C470M	ELECTRO 47UF 16WV		
C29			CE04LW1A470M	ELECTRO 47UF 10WV		
C30			CE04LW1J221M	ELECTRO 220UF 63WV		
C31			CE04LW1A470M	ELECTRO 47UF 10WV		
C32			CE04LW1V100M	ELECTRO 10UF 35WV		
C33			CE04LW1C470M	ELECTRO 47UF 16WV	TEG	
C34			CC45FSL1H331J	CERAMIC 330PF J		
C35			CE04LW1C330M	ELECTRO 33UF 16WV		
C36			CE04LW1V4R7M	ELECTRO 4.7UF 35WV		
C37			CE04LW1V100M	ELECTRO 10UF 35WV		
C38			CK45FF1H103Z	CERAMIC 0.010UF Z	TEG	
C39			CC45FSL1H101J	CERAMIC 100PF J	TEG	
C40			CC45FSL1H101J	CERAMIC 100PF J	TEG	
C41 ,42			CE04LW1A470M	ELECTRO 47UF 10WV		
C51 ,52			CC45FSL1H030C	CERAMIC 3.0PF C		
C53 ,54			CC45FSL1H151J	CERAMIC 150PF J	KPYMX	
C55 ,56			CK45FB1H391K	CERAMIC 390PF K	TEG	
C57 ,58			CE04LW1A101M	ELECTRO 100UF 10WV		
C59 ,60			CC45FSL1H050C	CERAMIC 5.0PF C	KPYMX	
			CC45FSL1H180J	CERAMIC 18PF J		
C61 ,62			CC45FSL1H470J	CERAMIC 47PF J		
C63 ,64			CK45FB1H102K	CERAMIC 1000PF K	TEG	
C63 ,64			CK45FB1H681K	CERAMIC 680PF K	KPYMX	
C65 ,66			CE04LW1H010M	ELECTRO 1.0UF 50WV		
C67 ,68			CE04LW1A101M	ELECTRO 100UF 10WV		

L: Scandinavia  
Y: FX (Far East, Hawaii)  
Y: AAFES (Europe)

K: USA  
T: England  
X: Australia

P: Canada  
E: Europe  
M: Other Areas

R: Mexico  
G: Germany

△ indicates safety critical components.

× New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

No.7

Ref. No. 参照番号	Address 位置	New Parts	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
C71 ,72			CC45FSL1H030C	CERAMIC 3.0PF C		
C73 ,74			CC45FSL1H151J	CERAMIC 150PF J		
C75 ,76			CE04LW1A101M	ELECTRO 100UF 10WV		
C77 ,78			CC45FSL1H050C	CERAMIC 5.0PF C		
C79 ,80			CC45FSL1H180J	CERAMIC 18PF J		
C81 ,82			CC45FSL1H470J	CERAMIC 47PF J		
C83 ,84			CK45FB1H681K	CERAMIC 680PF K		
C85 ,86			CE04LW1H010M	ELECTRO 1.0UF 50WV		
C87 ,88			CE04LW2A100M	ELECTRO 10UF 100WV		
C99			CE04LW1A101M	ELECTRO 100UF 10WV		
C100			CE04LW1C101M	ELECTRO 100UF 16WV		
C103-106			CK45FF1H103Z	CERAMIC 0.010UF Z		
C107-110			CF92FV1H224J	MF-C 0.22UF J	TEG	
C109,110			CQ93FMG1H104J	MYLAR 0.10UF J	KPYMX	
C113-116			CK45FF1H103Z	CERAMIC 0.010UF Z		
C117-120			CF92FV1H224J	MF-C 0.22UF J	TEG	
C118,119			CQ93FMG1H104J	MYLAR 0.10UF J	KPYMX	
C121-124			CK45FF1H472Z	CERAMIC 4700PF Z	TEG	
C125-128			CK45FB1H102K	CERAMIC 1000PF K	KPYMX	
C125,126			CK45FB1H332K	CERAMIC 3300PF K	TEG	
C127,128			CK45FB1H471K	CERAMIC 470PF K	TEG	
C129,130			CK45FB1H332K	CERAMIC 3300PF K	TEG	
C131			CK45FB1H391K	CERAMIC 390PF K	TEG	
C133			CE04LW1V4R7M	ELECTRO 4.7UF 35WV		
C134			CE04LW0J221M	ELECTRO 220UF 6.3WV		
C135			CQ93FMG1H473J	MYLAR 0.047UF J		
△ J1			E03-0148-05	AC OUTLET	KP	
△ J1			E03-0149-05	AC OUTLET	YMEG	
△ J1			E03-0310-05	AC OUTLET	T	
△ J4			E70-0018-05	SCREW TERMINAL BOARD FRONT SP	KPYMX	
△ J4			E70-0019-05	SCREW TERMINAL BOARD FRONT SP	TEG	
J5			E70-0046-05	LOCK TERMINAL BOARD C.SP/R.SP		
687			F20-1426-05	INSULATING BOARD		
△ F1	1D,2C		F05-3121-05	FUSE (SEMKO) (250V T3.15AL)	XTEG	
△ F1			F05-7026-05	FUSE (UL) (250V 7A)	KP	
△ F1 ,2			F05-3121-05	FUSE (SEMKO) (250V T3.15AL)	YM	
△ F2			F05-2525-05	FUSE (SEMKO) (250V T2.5AL)	EG	
△ F3 ,4			F04-1026-05	FUSE (UL) (250V 1A)	KP	
△ F3 ,4			F06-1022-05	FUSE (SEMKO) (250V T1AL)	YMXTEG	
△ F5 ,6			F05-1037-05	FUSE (250V 10A)	KP	
△ F5 ,6			F05-6321-05	FUSE (SEMKO) (250V T6.3A)	YMXTEG	
△ CN2 -13			J13-0075-05	FUSE CLIP	YMEG	
△ CN2 ,3			J13-0041-05	FUSE CLIP	KP	
△ CN2 ,3			J13-0075-05	FUSE CLIP	XT	
△ CN6 -13			J13-0075-05	FUSE CLIP	XT	
△ CN6 -9			J13-0075-05	FUSE CLIP	KP	
△ CN10-13			J13-0041-05	FUSE CLIP	KP	
△ J6 -8			J11-0098-05	WIRE CLAMPER		
△ L1 -4			L39-0085-05	PHASE COMPENSATION COIL		
△ T1			L07-1876-05	POWER TRANSFORMER	KP	
△ T1			L07-1877-05	POWER TRANSFORMER	YM	
△ T1			L07-1878-05	POWER TRANSFORMER	X	
△ T1			L07-1879-05	POWER TRANSFORMER	TEG	

L: Scandinavia  
Y: PX (Far East, Hawaii)  
Y: AAFES (Europe)

K: USA  
T: England  
X: Australia

P: Canada  
E: Europe  
M: Other Areas

R: Mexico  
G: Germany

△ indicates safety critical components.

PARTS LIST

KR-V7070



\* New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

No.8

Ref. No. 参照番号	Address 位置	New Parts	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
G	1D, 2C		N35-3010-46	BINDING HEAD MACHINE SCREW		
CP1 -3			R90-0840-05	RD 0.22 5W		
CP4			R90-0888-05	MULTIPLE RESISTOR		
R1			R92-1769-05	CARBON 3.3M J 1/2W	KP	
R8			RD14NB2E470J	RD 47 J 1/4W		
R9			RS14KB3A103J	FL-PROOF RS 10K J 1W		
R10 -12			RD14NB2E4R7J	RD 4.7 J 1/4W		
R30			RD14NB2E682J	RD 6.8K J 1/4W		
R33			RD14NB2E101J	RD 100 J 1/4W		
R41			RS14KB3A680J	FL-PROOF RS 68 J 1W		
R43			RS14KB3A680J	FL-PROOF RS 68 J 1W		
R45			RS14KB3A103J	FL-PROOF RS 10K J 1W		
R98			RD14NB2E332J	RD 3.3K J 1/4W		
R105-108			RD14NB2E271J	RD 270 J 1/4W		
R109,110		*	RD14NB2E272J	RD 2.7K J 1/4W		
R117-120			RD14NB2E271J	RD 270 J 1/4W		
R121,122		*	RD14NB2E272J	RD 2.7K J 1/4W		
R125-128			RS14KB3D4R7J	FL-PROOF RS 4.7 J 2W		
R137-140			RD14NB2E100J	RD 10 J 1/4W		
R150-152			RS14KB3D271J	FL-PROOF RS 270 J 2W	KPYMX	
R150-153			RS14KB3D271J	FL-PROOF RS 270 J 2W	TEG	
R154			RS14KB3D101J	FL-PROOF RS 100 J 2W		
R167			RD14NB2E470J	RD 47 J 1/4W		
R177			RS14KB3A330J	FL-PROOF RS 33 J 1W		
VR1 -4			R12-1617-05	TRIMMING POT. (2.2K)		
K1			S76-0002-05	MAGNETIC RELAY		
K2 -4			S51-2078-05	MAGNETIC RELAY		
K2 -4			S51-2092-05	MAGNETIC RELAY		
S1			S31-3010-05	SLIDE SWITCH AC VOLTAGE SEL	YM	
S2			S31-2136-05	SLIDE SWITCH IMPEDANCE SEL		
D1 -4			S5688B	DIODE		
D1 -4			1SR139-100	DIODE		
D5 ,6			HSS104A	DIODE		
D5 ,6			1SS131	DIODE		
D7			HSS104	DIODE		
D7			1SS133	DIODE		
D8			05FB20-4002-L20	DIODE		
D9 ,10			HSS104A	DIODE		
D9 ,10			1SS131	DIODE		
D11 ,12			S5688B	DIODE		
D11 ,12			1SR139-100	DIODE		
D13			RD5.6ES(B2)	ZENER DIODE		
D13			UZ-5.6BSB	ZENER DIODE		
D14			HSS104	DIODE		
D14			1SS133	DIODE		
D15			HSS104A	DIODE		
D15			1SS131	DIODE		
D16			RD4.7ES(B)	ZENER DIODE		
D16			UZ-4.7BS	ZENER DIODE		
D17			RD2.7ES(B2)	ZENER DIODE		
D17			UZ-2.7BSB	ZENER DIODE		
D18 ,19			RD6.8ES(B2)	ZENER DIODE		
D18 ,19		*	UZ-6.8BSB	ZENER DIODE		
D20			RD5.9ES(B2)	ZENER DIODE		

L: Scandinavia

K: USA

P: Canada

R: Mexico

Y: PX (Far East, Hawaii)

T: England

E: Europe

G: Germany

Y: AAFES (Europe)

X: Australia

M: Other Areas

⚠ indicates safety critical components.

\* New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

No.9

Ref. No. 参照番号	Address 位置	New Parts	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
D20		*	UZ-3.9BSB	ZENER DIODE		
D21 -24			S5688B	DIODE		
D21 -24			1SR139-100	DIODE		
D25			RD8.2ES(B2)	ZENER DIODE		
D25			UZ-8.2BSB	ZENER DIODE		
D26			RD6.2ES(B2)	ZENER DIODE		
D26			UZ-6.2BSB	ZENER DIODE		
D27 ,28			RD16ES(B2)	ZENER DIODE		
D27 ,28			UZ-16BSB	ZENER DIODE		
D29			RD6.2ES(B2)	ZENER DIODE		
D29			UZ-6.2BSB	ZENER DIODE		
D30			RD2.7ES(B2)	ZENER DIODE		
D30			UZ-2.7BSB	ZENER DIODE		
D31 -33			HSS104	DIODE		
D31 -33			1SS133	DIODE		
D42 -44			HSS104	DIODE		
D42 -44			1SS133	DIODE		
D51 ,52			HSS104	DIODE		
D51 ,52			1SS133	DIODE		
D71 -75			HSS104A	DIODE		
D71 -75			1SS131	DIODE		
D76			RD5.6ES(B2)	ZENER DIODE		
D76			UZ-5.6BSB	ZENER DIODE		
D81			HSS104	DIODE		
D81			1SS133	DIODE		
D82			RD5.6ES(B2)	ZENER DIODE		
D82			UZ-5.6BSB	ZENER DIODE		
D83			HSS104	DIODE		
D83			1SS133	DIODE		
D91 -96			HSS104	DIODE		
D91 -96			1SS133	DIODE		
IC1 ,2			UPC2581V	IC SET		
Q1			2SC2003(L,K)	TRANSISTOR		
Q2			2SA992(F,E)	TRANSISTOR		
Q3 ,4			2SD2012	TRANSISTOR		
Q3 ,4			2SD2061	TRANSISTOR		
Q3 ,4			2SD2374	TRANSISTOR		
Q5			2SC1740S(Q,R)	TRANSISTOR		
Q5			2SC2785(F,E)	TRANSISTOR		
Q6			2SA1175(F,E)	TRANSISTOR		
Q6			2SA933S(Q,R)	TRANSISTOR		
Q7			2SC1740S(Q,R)	TRANSISTOR		
Q7			2SC2785(F,E)	TRANSISTOR		
Q8			2SA1175(F,E)	TRANSISTOR		
Q8			2SA933S(Q,R)	TRANSISTOR		
Q9			2SC3940A(R,S)	TRANSISTOR		
Q10			2SA1534A(R,S)	TRANSISTOR		
Q11 -14			2SC1845(F,E)	TRANSISTOR		
Q21 -23			2SC1740S(Q,R)	TRANSISTOR		
Q21 -23			2SC2785(F,E)	TRANSISTOR		
Q27 ,28			2SC1845(F,E)	TRANSISTOR		
Q29			2SA992(F,E)	TRANSISTOR		
Q31 -34			DTC124ES	DIGITAL TRANSISTOR		
Q31 -34			UN4212	TRANSISTOR		
Q41			2SB1370	TRANSISTOR		

L: Scandinavia

K: USA

P: Canada

R: Mexico

Y: PX (Far East, Hawaii)

T: England

E: Europe

G: Germany

Y: AAFES (Europe)

X: Australia

M: Other Areas

⚠ indicates safety critical components.

KR-V7070

PARTS LIST

✱ New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

No.10

Ref. No. 参照番号	Address 位置	New Parts 部品番号	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
Q41			2SB1375	TRANSISTOR		
Q42			2SD2012	TRANSISTOR		
Q42			2SD2061	TRANSISTOR		
Q42			2SD2374	TRANSISTOR		
Q45, 46			2SC1740S(Q,R)	TRANSISTOR		
Q45, 46			2SC2785(F,E)	TRANSISTOR		
Q47, 48			2SA1175(F,E)	TRANSISTOR		
Q47, 48			2SA933S(Q,R)	TRANSISTOR		
Q49, 50			2SC1740S(Q,R)	TRANSISTOR		
Q49, 50			2SC2785(F,E)	TRANSISTOR		
Q51, 52			2SC1845(F,E)	TRANSISTOR		
Q62, 63			2SC1740S(Q,R)	TRANSISTOR		
Q62, 63			2SC2785(F,E)	TRANSISTOR		
Q65			2SD2012	TRANSISTOR		
Q65			2SD2061	TRANSISTOR		
Q65			2SD2374	TRANSISTOR		
Q101, 102			2SD222BT	TRANSISTOR		
Q103, 104			2SB1470BT	TRANSISTOR		
Q105, 106			2SC4137F19(V,W)	TRANSISTOR		
Q107,			2SD222BT	TRANSISTOR		
Q108			2SD2390LB	TRANSISTOR		
Q109			2SB1470BT	TRANSISTOR		
Q110			2SB1560LB	TRANSISTOR		
Q111, 112			2SC4137F19(V,W)	TRANSISTOR		
<b>AUDIO UNIT (X09-408X-XX)</b>						
C1 -14			C91-0749-05	CERAMIC	220PF	K
C3, 4			C91-0749-05	CERAMIC	220PF	K
C7, 8			C91-0749-05	CERAMIC	220PF	K
C11, 12			C91-0749-05	CERAMIC	220PF	K
C15, 16			CE04LW1H010M	ELECTRO	1.0UF	50WV
C17, 18			C91-0729-05	CERAMIC	22PF	J
C19, 20			CE04LW1C220M	ELECTRO	22UF	16WV
C21			CE04LW1H010M	ELECTRO	1.0UF	50WV
C22			CK45FB1H681K	CERAMIC	680PF	K
C23, 24			CE04LW1V100M	ELECTRO	10UF	35WV
C25, 26			CC45FSL1H221J	CERAMIC	220PF	J
C27, 28			CE04LW1A101M	ELECTRO	100UF	10WV
C29, 30			C91-0757-05	CERAMIC	1000PF	K
C31, 32			CQ93FMG1H123J	MYLAR	0.012UF	J
C33, 34			CQ93FMG1H332J	MYLAR	3300PF	J
C35, 36			CE04LW1V4R7M	ELECTRO	4.7UF	35WV
C37, 38			CE04LW1E470M	ELECTRO	47UF	25WV
C39, 42			CK45FF1H103Z	CERAMIC	0.010UF	Z
C43, 44			CC45FSL1H101J	CERAMIC	100PF	J
C45, 46			CK45FB1H471K	CERAMIC	470PF	K
C47, 48			C91-0735-05	CERAMIC	39PF	J
C61, 62			CE04LW1H010M	ELECTRO	1.0UF	50WV
C63, 64			CE04LW1HR47M	ELECTRO	0.47UF	50WV
C65, 68			CE04LW1V4R7M	ELECTRO	4.7UF	35WV
C71, 72			CC45FSL1H101J	CERAMIC	100PF	J
C73, 74			CC45FSL1H220J	CERAMIC	22PF	J
C77, 78			CE04LW1H010M	ELECTRO	1.0UF	50WV
C79, 80			CE04LW1HR47M	ELECTRO	0.47UF	50WV
C81, 82			CE04LW1V4R7M	ELECTRO	4.7UF	35WV
C85, 86			CE04LW1V4R7M	ELECTRO	4.7UF	35WV

L: Scandinavia

K: USA

P: Canada

R: Mexico

Y: PX (Far East, Hawaii)

T: England

E: Europe

G: Germany

Y: AAFES (Europe)

X: Australia

M: Other Areas

△ indicates safety critical components

✱ New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

No.11

Ref. No. 参照番号	Address 位置	New Parts 部品番号	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
C87, 88			CF92FV1H184J	MF-C	0.18UF	J
C89, 90			CC45FSL1H101J	CERAMIC	100PF	J
C91 -94			CE04LW1H010M	ELECTRO	1.0UF	50WV
C95, 96			CE04LW1V100M	ELECTRO	10UF	35WV
C97, 98			CK45FF1H103Z	CERAMIC	0.010UF	Z
C99, 100			CC45FSL1H101J	CERAMIC	100PF	J
C101			CK45FB1H471K	CERAMIC	470PF	K
C102			CK45FF1H103Z	CERAMIC	0.010UF	Z
C103			CE04HW1E4R7M	NP-ELEC	4.7UF	25WV
C105, 106			CK45FF1H103Z	CERAMIC	0.010UF	Z
C107			CK45FB1H471K	CERAMIC	470PF	K
C108			CK45FF1H103Z	CERAMIC	0.010UF	Z
C110, 111			CE04LW1C221M	ELECTRO	220UF	16WV
C112, 113			CC45FSL1H101J	CERAMIC	100PF	J
C131, 132			CE04LW1H010M	ELECTRO	1.0UF	50WV
C133, 134			CE04LW1V4R7M	ELECTRO	4.7UF	35WV
C151-154			C91-0749-05	CERAMIC	220PF	K
C151, 152			C91-0749-05	CERAMIC	220PF	K
C155			CK45FF1H103Z	CERAMIC	0.010UF	Z
C156			CK45FB1H221K	CERAMIC	220PF	K
C157, 158			CC45FSL1H470J	CERAMIC	47PF	J
C159-161			CE04LW1V100M	ELECTRO	10UF	35WV
C162-164			CK45FF1H103Z	CERAMIC	0.010UF	Z
C165, 166			CK45FB1H221K	CERAMIC	220PF	K
C167, 168			CK45FF1H103Z	CERAMIC	0.010UF	Z
C169			CE04HW1E100M	NP-ELEC	10UF	25WV
C170, 171			CK45FF1H103Z	CERAMIC	0.010UF	Z
C172			CE04LW1V4R7M	ELECTRO	4.7UF	35WV
C173, 174			CE04LW1A101M	ELECTRO	100UF	10WV
C201			CE04LW1V4R7M	ELECTRO	4.7UF	35WV
C202-204			CF92FV1H224J	MF-C	0.22UF	J
C205			CF92FV1H684J	MF-C	0.68UF	J
C209			CE04LW1A221M	ELECTRO	220UF	10WV
C210			CQ93FMG1H473J	MYLAR	0.047UF	J
C211			CQ93FMG1H562J	MYLAR	5600PF	J
C214			CF92FV1H224J	MF-C	0.22UF	J
C215			CE04LW1V100M	ELECTRO	10UF	35WV
C216			CE04LW1C101M	ELECTRO	100UF	16WV
C217, 218			CE04LW1V100M	ELECTRO	10UF	35WV
C220			CE04LW1C220M	ELECTRO	22UF	16WV
C221			CQ93FMG1H472J	MYLAR	4700PF	J
C222			CE04LW1V4R7M	ELECTRO	4.7UF	35WV
C223			CF92FV1H224J	MF-C	0.22UF	J
C224-227			CQ93FMG1H104J	MYLAR	0.10UF	J
C228, 229			CQ93FMG1H223J	MYLAR	0.022UF	J
C230			CK45FB1H681K	CERAMIC	680PF	K
C231			CQ93FMG1H473J	MYLAR	0.047UF	J
C232, 233			CQ93FMG1H104J	MYLAR	0.10UF	J
C235, 236			CE04LW1V100M	ELECTRO	10UF	35WV
C237, 238			CQ93FMG1H104J	MYLAR	0.10UF	J
C239			CQ93FMG1H473J	MYLAR	0.047UF	J
C240			CK45FB1H681K	CERAMIC	680PF	K
C241			CE04GW1E220M	LL-ELEC	22UF	25WV
C242			CE04LW1V100M	ELECTRO	10UF	35WV
C251-254			CE04LW1V100M	ELECTRO	10UF	35WV

L: Scandinavia

K: USA

P: Canada

R: Mexico

Y: PX (Far East, Hawaii)

T: England

E: Europe

G: Germany

Y: AAFES (Europe)

X: Australia

M: Other Areas

△ indicates safety critical components

PARTS LIST

KR-V7070

\* New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

No.12

Ref. No. 参照番号	Address 位置	New Parts	Parts No. 部品番号	Description 部品名/規格	Desti- nation 仕向	Re- marks 備考
C271, 272 C273 C274, 275 C281, 282 C301			CC45FSL1H101J CK45FB1H471K CK45FF1H103Z CE04LW1V100M CQ93FMG1H103J	CERAMIC 100PF J CERAMIC 470PF K CERAMIC 0.010UF Z ELECTRO 10UF 35WV MYLAR 0.010UF J		
C302 C303 C304, 305 C306 C307			CQ93FMG1H123J CK45FB1H821K CQ93FMG1H472J CC45FSL1H271J CE04LW1V4R7M	MYLAR 0.012UF J CERAMIC 820PF K MYLAR 4700PF J CERAMIC 270PF J ELECTRO 4.7UF 35WV		
C310 C311, 312 C313, 314 C315, 316 C317			CE04LW1C101M CQ93FMG1H104J CE04LW1A101M CQ93FMG1H104J CE04LW1A101M	ELECTRO 100UF 16WV MYLAR 0.10UF J ELECTRO 100UF 10WV MYLAR 0.10UF J ELECTRO 100UF 10WV		
C318 C319 C320 C321, 322 C323, 324			CQ93FMG1H392J CE04LW1A101M CK45FF1H103Z CC45FSL1H101J CE04LW1V4R7M	MYLAR 3900PF J ELECTRO 100UF 10WV CERAMIC 0.010UF Z CERAMIC 100PF J ELECTRO 4.7UF 35WV		
C325, 326 C327, 328 C329, 330 C331-333 C336			CQ93FMG1H562J CC45FSL1H181J CQ93FMG1H472J CE04LW1V4R7M CE04LW1V4R7M	MYLAR 5600PF J CERAMIC 180PF J MYLAR 4700PF J ELECTRO 4.7UF 35WV ELECTRO 4.7UF 35WV		
C351, 352 C353 C354 C355 C356			CE04LW1HR22M CE04LW1V100M CE04LW1H010M CC45FSL1H101J CE04LW1H010M	ELECTRO 0.22UF 50WV ELECTRO 10UF 35WV ELECTRO 1.0UF 50WV CERAMIC 100PF J ELECTRO 1.0UF 50WV		
C357, 358 C359 C360, 361 C362 C364			CE04LW1V4R7M CE04LW1C101M CC45FSL1H101J CE04LW1V4R7M CE04LW1V220M	ELECTRO 4.7UF 35WV ELECTRO 100UF 16WV CERAMIC 100PF J ELECTRO 4.7UF 35WV ELECTRO 22UF 35WV		
C381 C382, 383 C385, 386 C501 C502			CC45FSL1H220J CE04LW1V4R7M CE04LW1V4R7M CE04LW1H2R2M CC45FSL1H331J	CERAMIC 22PF J ELECTRO 4.7UF 35WV ELECTRO 4.7UF 35WV ELECTRO 2.2UF 50WV CERAMIC 330PF J	TEG TEG	
C503 C504 C505 C506 C507			CK45FB1H561K CK45FF1H103Z CE04LW1V100M CC45FCH1H470J CC45FCH1H220J	CERAMIC 560PF K CERAMIC 0.010UF Z ELECTRO 10UF 35WV CERAMIC 47PF J CERAMIC 22PF J	TEG TEG TEG TEG TEG	
C508 C509 C510 C511 C512			CK45FF1H103Z CE04LW1V100M CK45FF1H103Z CE04LW1V470M CK45FB1H102K	CERAMIC 0.010UF Z ELECTRO 10UF 35WV CERAMIC 0.010UF Z ELECTRO 47UF 35WV CERAMIC 1000PF K	TEG TEG TEG TEG TEG	
C513			CC45FSL1H101J	CERAMIC 100PF J	TEG	
J1 .2 J4			E63-0070-15 E63-0040-15 E63-0116-05	PHONE JACK(16P)VIDEO/TP/CD/PHO PHONE JACK(4P)VIDEO 2 PHONE JACK(1P)S.W OUT		J

L: Scandinavia  
Y: PX (Far East, Hawaii)  
Y: AAFES (Europe)

K: USA  
T: England  
X: Australia

P: Canada  
E: Europe  
M: Other Areas

R: Mexico  
G: Germany

△ indicates safety critical components.

\* New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

No.13

Ref. No. 参照番号	Address 位置	New Parts	Parts No. 部品番号	Description 部品名/規格	Desti- nation 仕向	Re- marks 備考
J5 J6 J7		*	E63-0069-15 E63-0130-05 E11-0188-05	PHONE JACK(4P)VIDEO 1/VIDEO 2 PHONE JACK(1P)VIDEO MONITOR OUT MINIATURE PHONE JACK(2P)S.CONT		J
688	2D		J19-3331-05	UNIT HOLDER		
L1 .2 L501-503 L504, 505 X1 X501			L40-1091-17 L40-1091-17 L40-1001-17 L78-0601-05 L77-2002-05	SMALL FIXED INDUCTOR(1UH) SMALL FIXED INDUCTOR(1UH) SMALL FIXED INDUCTOR(10UH,K) RESONATOR (7.16MHz) CRYSTAL RESONATOR(4.332MHz)	TEG TEG TEG	
X502			L78-0244-05	RESONATOR (4.000M)	TEG	
R108, 109 R177, 178 R206 R226 R309			RD14NB2E470J RD14NB2E220J RN14BK2C1003F RD14NB2E101J RD14NB2E101J	RD 47 J 1/4W RD 22 J 1/4W RN 100K F 1/6W RD 100 J 1/4W RD 100 J 1/4W		
R370 R510			RD14NB2E101J RS14KB3D331J	RD 100 J 1/4W FL-PROOF RS 330 J 2W	TEG	
D1 .2 D1 .2 D3 D3 D51 -57			HSS104 1SS133 RD5.1ES(B2) UZ-5.1BSB HSS104	DIODE DIODE ZENER DIODE ZENER DIODE DIODE		
D51 -57 D61 -68 D61 -68 D501 D501			1SS133 HSS104 1SS133 RD5.1ES(B2) UZ-5.1BSB	DIODE DIODE DIODE ZENER DIODE ZENER DIODE	TEG TEG	
IC1 IC2 IC3 .4 IC5 .6 IC7 -10			NJU7313AL NJU7312AL NJM45800-D LC7536R NJM4565L	ANALOGUE IC ANALOGUE IC IC(OP AMP X2) ANALOGUE IC IC(OP AMP X2)		
IC11 IC12 IC13 IC14 IC15			NJM2177AFB3 NJU7311AL YM7128B NE571N NJM2279D	ANALOGUE IC ANALOGUE IC IC(DIGITAL SURROUND) IC(COMPANDOR) IC(VIDEO IC)		
IC16 IC17 IC18 IC19 IC19		*	MC14576CP UPC78L05J NJM4565L NJM072BL NJM2082L	ANALOGUE IC IC(VOLTAGE REGULATOR/ +5V) IC(OP AMP X2) IC(OP AMP) IC(OP AMP)		
IC20-23 IC501 IC502 Q1 -4 Q5 .6			NJM4565L SAA6579 LC6543H-4D68 2SC2878(B) 2SC1845(F,E)	IC(OP AMP X2) ANALOGUE IC MT-COM IC TRANSISTOR TRANSISTOR	TEG TEG	
Q7 .8 Q9 Q9 Q10 .11 Q21 -23			2SK246(Y,GR) 2SA1175(F,E) 2SA933S(Q,R) 2SC1845(F,E) 2SC2878(B)	FET TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR		

L: Scandinavia  
Y: PX (Far East, Hawaii)  
Y: AAFES (Europe)

K: USA  
T: England  
X: Australia

P: Canada  
E: Europe  
M: Other Areas

R: Mexico  
G: Germany

△ indicates safety critical components.

KR-V7070

PARTS LIST

\* New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

No.14

Ref. No.	Address	New Parts	Parts No.	Description	Desti- nation	Re- marks
参照番号	位置	新	部品番号	部品名 / 規格	仕向	備考
Q24			2SA1175(F,E)	TRANSISTOR		
Q24			2SA933S(Q,R)	TRANSISTOR		
Q25			2SC1740S(Q,R)	TRANSISTOR		
Q25			2SC2785(F,E)	TRANSISTOR		
<b>DISPLAY UNIT (X14-397X-XX)</b>						
D29			B30-2461-05	LED(RED)		
C1			CE04LW1V4R7M	ELECTRO 4.7UF 35WV		
C2			CE04LW1H010M	ELECTRO 1.0UF 50WV		
C3			C90-1827-05	ELECTRO 0.047UF 5.5WV		
C4			CE04LW1A101M	ELECTRO 100UF 10WV		
C5 ,6			CE04LW1V4R7M	ELECTRO 4.7UF 35WV		
C7			CE04LW1C330M	ELECTRO 33UF 16WV		
C10 -14			C91-0769-05	CERAMIC 0.010UF K		
C15 ,16			CK45FF1H103Z	CERAMIC 0.010UF Z		
C17			C91-0769-05	CERAMIC 0.010UF K		
C18			C91-0085-05	CERAMIC 0.022UF N		
C19 ,20			C90-3228-05	ELECTRO 47UF 16WV		
C21 ,22			C91-0749-05	CERAMIC 220PF K		
C23 ,24			C90-3231-05	ELECTRO 3.3UF 25WV		
C25 ,26			C91-0737-05	CERAMIC 47PF J		
C27			C91-0754-05	CERAMIC 560PF J		
C28			CK45FB1H561K	CERAMIC 560PF K		
C29 ,30			CE04LW1V100M	ELECTRO 10UF 35WV		
C31			C90-3224-05	ELECTRO 4.7UF 16WV		
C32			CE04LW1V4R7M	ELECTRO 4.7UF 35WV		
C33 ,34			CQ93FMG1H393J	MYLAR 0.039UF J		
C35 ,36			CQ93FMG1H563J	MYLAR 0.056UF J		
C41			CK45FF1H103Z	CERAMIC 0.010UF Z	KPYMX	
C41			CQ93FMG1H223J	MYLAR 0.022UF J	TEG	
C42 ,43			CK45FB1H561K	CERAMIC 560PF K		
C44			CK45FF1H103Z	CERAMIC 0.010UF Z		
C45			CQ93FMG1H223J	MYLAR 0.022UF J		
C46			CK45FF1H103Z	CERAMIC 0.010UF Z		
J1			E11-0190-05	PHONE JACK PHONES		
			L78-0267-05	RESONATOR (4.194MHz)		
X1			R90-0856-05	MULTI-COMP 10KX5 J 1/6W		
CP2			RD14NB2E221J	RD 220 J 1/4W		
R19 ,20			RD14NB2E100J	RD 10 J 1/4W		
R22			RD14NB2E121J	RD 120 J 1/4W		
R84 ,85			RS14KB3D561J	FL-PROOF RS 560 J 2W		
R112,113			R31-0036-05	VARIABLE RESISTOR		
VR1 ,2			S40-1064-05	PUSH SWITCH		
S1 -15			S40-1064-05	PUSH SWITCH AF/PTY/DISPLAY		
S16 -18			S40-1064-05	PUSH SWITCH		
S19 -32			S40-1064-05	PUSH SWITCH		
S34 -36			T99-0554-05	ROTARY ENCODER VOLUME CONTROL		
S37			T99-0547-05	SPEED DETECTOR INPUT/MULTI		
S38 ,39			RD8.2ES(B2)	ZENER DIODE		
D1			UZ-8.2BSB	ZENER DIODE		
D1						

L: Scandinavia  
Y: PX (Far East, Hawaii)  
Y: AAFES (Europe)K: USA  
T: England  
X: AustraliaP: Canada  
E: Europe  
M: Other AreasR: Mexico  
G: Germany

A indicates safety critical components

\* New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

No.15

Ref. No.	Address	New Parts	Parts No.	Description	Desti- nation	Re- marks
参照番号	位置	新	部品番号	部品名 / 規格	仕向	備考
D2			RD2.7ES(B2)	ZENER DIODE		
D2			UZ-2.7BSB	ZENER DIODE		
D3 -14			HSS104	DIODE		
D3 -14			1SS133	DIODE		
D15 -22			HSS104A	DIODE		
D15 -22			1SS131	DIODE		
D15 -23			HSS104A	DIODE		
D15 -23			1SS131	DIODE		
D15 -24			HSS104A	DIODE		
D15 -24			1SS131	DIODE		
D25			HSS104A	DIODE		
D25			1SS131	DIODE		
D28			HSS104A	DIODE		
D28			1SS131	DIODE		
D34 -36			HSS104	DIODE		
D34 -36			1SS133	DIODE		
ED1			11-MT-990K	INDICATOR TUBE		
IC1			UPD78044AGF-071	MI-COM IC		
IC1			UPD78045AGF-013	MI-COM IC		
IC2			S-80740AL	IC(VOLTAGE DETECTOR)		
IC3			NJM45800-D	IC(OP AMP X2)		
Q1 ,2			2SC1740S(Q,R)	TRANSISTOR		
Q1 ,2			2SC2785(F,E)	TRANSISTOR		
Q3			2SA1175(F,E)	TRANSISTOR		
Q3			2SA933S(Q,R)	TRANSISTOR		
Q4 ,5			2SC1740S(Q,R)	TRANSISTOR		
Q4 ,5			2SC2785(F,E)	TRANSISTOR		
A1			W02-1153-05	ELECTRIC CIRCUIT MODULE		
A1			W02-1174-05	ELECTRIC CIRCUIT MODULE		

L: Scandinavia  
Y: PX (Far East, Hawaii)  
Y: AAFES (Europe)K: USA  
T: England  
X: AustraliaP: Canada  
E: Europe  
M: Other AreasR: Mexico  
G: Germany

A indicates safety critical components

PARTS LIST

KR-V7070

# KR-V7070

## SPECIFICATIONS

### Audio section

Rated power output at the STEREO operation

100 watts per channel minimum RMS, both channels driven at 8  $\Omega$ , from 20 Hz to 20,000 Hz with no more than 0.06 % total harmonic distortions. (FTC)

Power output at the Surround operation  
Front

100 watts per channel minimum RMS, both channels driven at 8  $\Omega$ , 1 kHz with no more than 0.7 % total harmonic distortions. (FTC)

Center

100 watts per channel minimum RMS, both channels driven at 8  $\Omega$ , 1 kHz with no more than 0.7 % total harmonic distortions. (FTC)

Rear

28 watts per channel minimum RMS, both channels driven at 8  $\Omega$ , 1 kHz with no more than 0.7 % total harmonic distortions. (FTC)

Total harmonic distortion (1 kHz, 8  $\Omega$ ) ..... 0.01 % at 50 W

Signal to noise ratio (IHF A)

PHONO (MM) ..... 75 dB

CD ..... 98 dB

Input sensitivity / impedance

PHONO (MM) ..... 2.5 mV / 47 k $\Omega$

CD, TAPE, VIDEO ..... 200 mV / 47 k $\Omega$

Output level / impedance

S.W. OUT ..... 2.0 V / 600  $\Omega$

Tone controls

BASS .....  $\pm 10$  dB (at 100 Hz)

TREBLE .....  $\pm 10$  dB (at 10 kHz)

N.B. circuit ..... + 9 dB (70 Hz)

### Video section

VIDEO inputs / outputs (Composite) ..... 1 Vp-p / 75  $\Omega$

#### Note:

Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on the U.S.A. (K) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

### FM Tuner section

Tuning frequency range ..... 87.5 MHz ~ 108 MHz

Usable sensitivity (IHF) ..... 13.2 dBf (1.2  $\mu$ V at 75  $\Omega$ )

50 dB quieting sensitivity

STEREO ..... 41.2 dBf (32  $\mu$ V at 75  $\Omega$ )

Total harmonic distortion at 1 kHz

MONO ..... 0.6 %

STEREO ..... 0.7 %

Signal to noise ratio at 65 dBf (IHF)

MONO ..... 75 dB

STEREO ..... 68 dB

Selectivity (IHF  $\pm$  400 kHz) ..... 50 dB

Stereo separation (IHF at 1 kHz) ..... 40 dB

Frequency response ..... 30 Hz ~ 15 kHz, + 0.5 dB, - 3.0 dB

### AM Tuner section

Tuning frequency range ..... 530 kHz ~ 1,700 kHz

Usable sensitivity ..... 12  $\mu$ V / (500  $\mu$ V / m)

Total harmonic distortion ..... 0.7 %

Signal to noise ratio ..... 48 dB

Selectivity ..... 30 dB

### General

Power consumption ..... 3.5 A

AC outlet

SWITCHED ..... 2: (total 150 W, 1.25 A max.)

Dimensions ..... W: 440 mm (17-5/16")

H: 144 mm (5-11/16")

D: 347 mm (13-11/16")

Weight (net) ..... 9.8 kg (21.6 lb)

## KENWOOD CORPORATION

14-6, Dogenzaka 1-chome, Shibuya-ku, Tokyo, 150 Japan

KENWOOD SERVICE CORPORATION

P.O. BOX 22745, 2201 East Dominguez St., Long Beach, CA 90801-5745 U.S.A.

KENWOOD ELECTRONICS CANADA INC.

6070 Kestrel Road, Mississauga, Ontario, Canada L5T 1S8

KENWOOD ELECTRONICS LATIN AMERICA S.A.

P.O. BOX 55-2791, Piso 6 Plaza Chase, Cl. 47 y Aquilino de la Guardia, Panama, Republic de Panama

TRIO-KENWOOD U.K. LIMITED

KENWOOD House, Dwight Road, Watford, Herts, WD1 8EB United Kingdom

KENWOOD ELECTRONICS BENELUX N.V.

Mechelsesteenweg 418 B-1930 Zaventem, Belgium

KENWOOD ELECTRONICS DEUTSCHLAND GMBH

Rembrücker Str. 15, 63150 Heusenstamm, Germany

TRIO-KENWOOD FRANCE S.A.

13 Boulevard Ney, 75018 Paris, France

KENWOOD ELECTRONICS ITALIA S.p.A.

Via G. Sironi, 7/9 20129 Milano, Italy

KENWOOD ESPAÑA S.A.

Bolivia, 239-08020 Barcelona, Spain

KENWOOD ELECTRONICS AUSTRALIA PTY. LTD. (A.C.N. 001 499 074)

P.O. BOX 504, 8 Figtree Drive, Australia Centre, Homebush, N.S.W. 2140, Australia

KENWOOD & LEE ELECTRONICS, LTD.

Unit 3712-3724, Level 37 Tower 1, Metroplaza, 223 Hing Fong Road, Kwai Fong, N.T. Hong Kong

KENWOOD ELECTRONICS SINGAPORE PTELTD.

No. 1 Genting Lane # 07-00, KENWOOD Building, Singapore, 1334

KENWOOD ELECTRONICS (MALAYSIA) SDNBHD

10 th Floor, Block B, Wisma Semantan, No. 12, Jalan Gelanggang, Bukit Damansara, 50490 Kuala Lumpur Malaysia